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Water Resources Data for New Jersey Volume 2: Delaware River Basin and Tributaries to Delaware Bay

(U.S.) Geological Survey
Trenton, NJ

Jun 81

U.S. Department of Commerce
National Technical Information Service
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Water Resources Data for New Jersey

Volume 2. Delaware River Basin and Tributaries to Delaware Bay

U.S. GEOLOGICAL SURVEY WATER-DATA REPORT NJ-80-2

WATER YEAR 1980

Prepared in cooperation with the New Jersey Department of Environmental Protection and with other agencies

REPRODUCED BY
NATIONAL TECHNICAL INFORMATION SERVICE
U.S. DEPARTMENT OF COMMERCE
SPRINGFIELD, VA 22161

CALENDAR FOR WATER YEAR 1980

1979

OCTOBER

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1980

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U.S. DEPARTMENT OF THE INTERIOR
March 3, 1849

Water Resources Data for New Jersey

Volume 2. Delaware River Basin and Tributaries to Delaware Bay

U.S. GEOLOGICAL SURVEY WATER-DATA REPORT NJ-80-2

WATER YEAR 1980

Prepared in cooperation with the New Jersey
Department of Environmental Protection and
with other agencies

UNITED STATES DEPARTMENT OF THE INTERIOR

JAMES G. WATT, Secretary

GEOLOGICAL SURVEY

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Trenton, New Jersey 08608

1981

PREFACE

This report was prepared by the U.S. Geological Survey in cooperation with the State of New Jersey and with other agencies by personnel of the New Jersey district of the Water Resources Division under the supervision of D. E. Vaupel, District Chief, and J. E Biesecker, Regional Hydrologist, Northeastern Region.

This report is one of a series issued State by State under the general direction of Philip Cohen, Chief Hydrologist,U.S. Geological Survey, and R. J. Dingman, Assistant Chief Hydrologist for Scientific Publications and Data Management.

Data for New Jersey are in two volumes as follows:

Volume 1. Atlantic Slope Basins, Hudson River to Cape May
Volume 2. Delaware River Basin and Tributaries to Delaware Bay

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Water resources data for the 1980 water year for New Jersey consist of records of stage, discharge, and water quality of streams; stage, contents, and water quality of lakes and reservoirs; and water levels and water quality of ground water. This volume of the report contains discharge records for 27 gaging stations; tide summaries for 3 stations; stage and contents for 16 lakes and reservoirs; water quality for 59 surface-water sites and 95 wells; and water levels for 16 observation wells. Also included are data for 27 crest-stage partial-record stations, 7 tidal crest-stage gages, and 19 low-flow partial-record stations. Additional water data were collected at various sites, not part of the systematic data collection program, and are published as miscellaneous measurements. These data represent that part of the national water data system operated by U.S. Geological Survey and cooperating State and Federal agencies in New Jersey.

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SURFACE WATER STATIONS, IN DOWNSTREAM ORDER, FOR WHICH RECORDS ARE PUBLISHED

[Letter after station name designates type of data: (d) discharge, (c) chemical, (b) biological, (m) microbiological (e) elevation, gage height or contents, (t) water temperature, (s) sediment]

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INTRODUCTION

Water resources data for the 1980 water year for New Jersey consist of records of stage, discharge, and water quality of streams; stage, and contents of lakes and reservoirs; and water levels and water quality of ground water. This volume of the report contains discharge records for 27 gaging stations; tide summaries for 3 stations; stage and contents for 16 lakes and reservoirs; water quality for 59 surface water sites, and 95 wells; and water levels for 16 observation wells. Also included are data for 27 crest-stage partial-record stations; 7 tidal crest-stage gage and 19 low-flow partial-record stations. Locations of these sites are shown in figures 5, 6, and 7. Additional water data were collected at various sites, not part of the systematic data collection program, and are published as miscellaneous measurements. These data represent that part of the National Water Data System operated by the U.S. Geological Survey and cooperating State and Federal agencies in New Jersey.

Records of discharge or stage of streams, and contents or stage of lakes and reservoirs were first published in a series of U.S. Geological Survey water-supply papers entitled, "Surface Water Supply of the United States." Through water year 1960, these water-supply papers were in an annual series and then in a 5-year series for 1961-65 and 1966-70. Records of chemical quality, water temperatures, and suspended sediment were published from 1941 to 1970 in an annual series of water-supply papers entitled, "Quality of Surface Waters of the United States." Records of ground-water levels were published from 1935 to 1974 in a series of water-supply papers entitled "Ground-Water Levels in the United States." Water-supply papers may be consulted in the libraries of the principal cities in the United States or may be purchased from Branch of Distribution, U.S. Geological Survey, 1200 South Eads Street, Arlington, VA 22202.

For water years 1961 through 1970, streamflow data were released by the Geological Survey in annual reports on a State-boundary basis. Water-quality records for water years 1964 through 1970 were similarly released either in separate reports or in conjunction with streamflow records.

Beginning with the 1971 water year, water data for streamflow, water quality, and ground water are published as an offical Survey report on a State-boundary basis. These offical Survey reports carry an identification number consisting of the two letter State abbreviation, the last two digits of the water year, and the volume number. For example, this volume of the report is identified as "U.S. Geological Survey Water-Data Report NJ-80-2." These water-data reports are for sale, in paper copy or in microfiche by the National Technical Information Service, U.S. Department of Commerce, Springfield, VA 22161.

Additional information, including current prices, for ordering specific reports may be obtained from the district chief at the address given on the back of the title page or by telephone (609) 989-2162.

COOPERATION

This report was prepared by the U.S. Geological Survey under cooperative agreement with the following organizations:

New Jersey Department of Environmental Protection, Jerry F. English, commissioner.
  Division of Water Resources, Arnold Schiffman, director.
  Division of Fish, Game and Wildlife, Russell A. Cookingham, director.
New Jersey Department of Agriculture, Phillip Alampi, secretary.
  Division of Rural Resources, Richard D. Chumney, director.
Delaware River Basin Commission, Gerald M. Hansler, executive director.
North Jersey District Water Supply Commission, Dean C. Noll, chief engineer.
Passaic Valley Water Commission, W.E. Inhoffer, general superintendent and chief engineer.
County of Bergen, V.J. Nunno, director of Public Works and E.R. Ranuska, county engineer.
County of Camden, Joseph T. Patermo, director of Camden County Planning Board.
County of Morris, James Plante, chairman of Morris County Municipal Utilities Authority.
County of Somerset, Thomas E. Decker, county engineer, and Thomas Harris, administrative engineer.
Township of West Windsor, Larry Ellery, chairman of Environmental Commission.

Assistance in the form of funds was given by the Corps of Engineers, U.S. Army, in collecting records for 50 surface water stations, and for the collection of sediment records at four stream-sampling stations, and by the U.S. Environmental Protection Agency for the collection of chemical analyses at four stream-sampling stations. In addition, several stations were operated fully or partially from funds appropriated directly to the Geological Survey. Assistance was also furnished by the National Weather Service and the National Ocean Survey.

Basic water-quality data collected at many sampling stations on the main stem of the Delaware River and estuary--an interstate stream--included in this report were collected in cooperation with the following additional agencies:

City of Philadelphia Water Department, W. J. Marrazzo, commissioner.
Pennsylvania Department of Environmental Resources, Clifford L. Jones, secretary.
Delaware Geological Survey, Robert R. Jordan, State geologist.
Delaware River Master, Francis T. Schaefer.

The following organizations aided in collecting records:

Municipalities of Atlantic City, Jersey City, Newark, New Brunswick and Spotswood; American Cyanamid Co.; Commonwealth Water Co.; Elizabethtown Water Co.; Ewing-Lawrence Sewerage Authority: Hackensack Water Co.; Johns-Manville Products Corp.; and Monmouth Consolidated Water Co.

Organizations that supplied data are acknowledged in station descriptions.

ACKNOWLEDGMENTS

The water resources data for New Jersey were processed and prepared for publication under the supervision of John J. Murphy Chief, Hydrologic Records Section, by R. D. Schopp, G. R. Kish, E. W. Moshinsky, F. L. Schaefer, E. A. Pustay, S. J. Perry, and I. C. H. Santana. The data were collected, computed and processed by other personnel as follows:

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HYDROLOGIC CONDITIONS

Water year 1980 began with streamflow above the normal range throughout New Jersey. February precipitation was only 35 percent of normal causing streams to drop below normal. Above normal rainfall during March and April kept runoff normal or above normal through May. Starting in May, precipitation was below average for the rest of the water year for most of the State. Runoff declined steadily from May through September. On September 27 the Governor of New Jersey ordered mandatory water rationing in 114 northern New Jersey communities due to declining reservoir levels.

Monthly and annual discharges are compared with medians at three representative gaging stations in figures 2 and 3. The streamflow stations chosen for illustration were South Branch Raritan River near High Bridge and Great Egg Harbor River at Folsom, which reflect runoff conditions in the northern and southern parts of the State, respectively, and Delaware River at Trenton in which there is widespread interest.

Streamflow at South Branch Raritan River near High Bridge for the year averaged 140 ft^3/s (3.96 m^3/s), 116 percent of normal. The average flow for Great Egg Harbor River at Folsom was 90.0 ft^3/s (2.55 m^3/s), 103 percent of normal. The observed annual mean discharge on the Delaware River at Trenton was 11,500 ft^3/s (325.7 m^3/s), 90 percent of normal. The natural flow at Trenton (adjusted for diversion and storage upstream) was 93 percent of normal for the year.

Storage in the 13 major water-supply reservoirs in New Jersey decreased from 67.9 billion gallons (90 percent of capacity) on October 1 to 35.2 billion gallons (47 percent of capacity) on September 30. Storage in Wanaque Reservoir decreased from 24.2 billion gallons (86 percent of capacity) on October 1 to 12.3 billion gallons (44 percent of capacity) on September 30. Pumped storage in Round Valley Reservoir decreased from 54.5 billion gallons (99 percent of capacity) on October 1 to 45.4 billion gallons (83 percent of capacity) on September 30.

Water levels in water-table aquifers in the Coastal Plain portion of the State generally were above normal from October to April and near-normal during the remainder of the water year. Water levels in the heavily stressed artesian aquifers; however, continued to be lower than normal in the Coastal Plain. Declines in water levels were most notable in the Englishtown aquifer and aquifers in the Potomac-Raritan-Magothy aquifer system. Data for 32 wells which tap these artesian aquifers were published this year. Water levels in 18 of the wells in this group established new lows of record. In the northern portion of the State, north of the Fall Line, water levels in water-table, semi-artesian, and artesian aquifers varied from near normal to moderately below normal.

Monthly water levels are compared with long-term averages at two representative observation wells in figure 4. The wells chosen for illustration were Whites Lab. 3 in Union County and Crammer in Ocean County. Ten-year hydrographs for other selected wells also are included in these reports under the ground-water level records for the specific wells.

DEFINITION OF TERMS

Terms related to streamflow, water-quality and other hydrologic data, as used in this report, are defined below. See also the table for converting Inch-pound Units to Metric Units on the inside of the back cover.

Acre-foot (AC-FT, acre-ft) is the quantity of water required to cover 1 acre to a depth of 1 foot and is equivalent to 43,560 cubic feet or about 326,000 gallons or 1,233 cubic meters.

Adenosine triphosphate (ATP) is the primary energy donor in cellular life processes. Its central role in living cells makes it an excellent indicator of the presence of living material in water. A measure of ATP therefore provides a sensitive and rapid estimate of biomass. ATP is reported in micrograms per liter of the original water sample.

Algae are mostly aquatic single-celled, colonial, or multi-celled plants, containing chlorophyll and lacking roots, stems, and leaves.

Algal growth potential (AGP) is the maximum algal dry weight biomass that can be produced in a natural water sample under standardized laboratory conditions. The growth potential is the algal biomass present at stationary phase and is expressed as milligrams dry weight of algae produced per liter of sample.

Aquifer is a geologic formation, group of formations, or part of a formation that contains sufficient saturated permeable material to yield significant quantities of water to wells and springs.

Aquifer codes and geologic names:

The following list shows the aquifer codes and geologic names of the formations in which the sampled wells are finished. The aquifer codes also appear in the column "Geologic Unit" in the ground-water quality tables:

112CPMY , CAPE MAY FORMATION, UNDIFFERENTIATED
112ESRNS , CAPE MAY FORMATION, ESTUARINE SAND FACIES
112PLCC , PLEISTOCENE-COHANSEY SAND, UNDIFFERENTIATED
121CNSY , COHANSEY SAND
121CKKD , COHANSEY SAND-KIRKWOOD FORMATION, UNDIFFERENTIATED
112TILL , GLACIAL TILL
112OTS4 , STRATIFIED DRIFT
122KRKDU , KIRKWOOD FORMATION, UPPER SAND
122KRKD , KIRKWOOD FORMATION
122KRKDL , KIRKWOOD FORMATION, LOWER SAND
124MQVC , MANASQUAN-VINCENTOWN FORMATION, UNDIFFERENTIATED

124PNPN , PINEY POINT FORMATION
211MLRW , MOUNT LAUREL SAND-WENONAH FORMATION
211EGLS , ENGLISHTOWN FORMATION
211MGRR , POTOMAC-RARITAN-MAGOTHY AQUIFER SYSTEM
211ODBG , MAGOTHY FORMATION, OLD BRIDGE SAND MEMBER
211FRNG , RARITAN FORMATION, FARRINGTON SAND MEMBER
231BRCK , BRUNSWICK SHALE OR FORMATION
231SCKN , STOCKTON FORMATION

Artesian means confined and is used to describe a well in which the water level stands above the top of the aquifer, tapped by the well. A flowing artesian well is one in which the water level is above land surface.

Bacteria are microscopic unicellular organisms, typically spherical, rod-like, or spiral and threadlike in shape, often clumped into colonies. Some bacteria cause disease, other perform an essential role in nature in the recycling of materials; for example, by decomposing organic matter into a form available for reuse by plants.

Total coliform bacteria are a particular group of bacteria that are used as indicators of possible sewage pollution. They are characterized as aerobic or facultative anaerobic, gram-negative, nonspore-forming, rod-shaped bacteria which ferment lactose with gas formation within 48 hours at 35°C. In the laboratory these bacteria are defined as all the organisms which produce colonies with a golden-green metallic sheen within 24 hours when incubated at 35°C ± 0.5°C on M-Endo medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 ml of sample.

Fecal coliform bacteria are bacteria that are present in the intestines or feces of warmblooded animals. They are often used as indicators of the sanitary quality of the water. In the laboratory they are defined as all organisms which produce blue colonies within 24 hours when incubated at 44.5°C ± 0.2°C on M-FC medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 ml of sample.

Fecal streptococcal bacteria are bacteria found also in the intestine of warm-blooded animals. Their presence in water is considered to verify fecal pollution. They are characterized as gram-positive, cocci bacteria which are capable of growth in brain-heart infusion broth. In the laboratory they are defined as all the organisms which produce red or pink colonies within 48 hours at 35°C ± 0.5°C on KF streptococcus medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 ml of sample.

Bedload is the sediment which moves along in essentially continuous contact with the streambed by rolling, sliding, and making brief excursions into the flow a few diameters above the bed.

Bed material is the unconsolidated material of which a streambed, lake, pond, reservoir, or estuary bottom is composed.

Biochemical oxygen demand (BOD) is a measure of the quantity of dissolved oxygen, in milligrams per liter, used for the decomposition of organic matter by microorganisms, such as bacteria.

Biomass is the amount of living matter present at any given time, expressed as the weight per unit area or volume of habitat.

Ash mass is the mass or amount of residue present after the residue from the dry mass determination has been ashed in a muffle furnace at a temperature of 500°C for 1 hour. The ash mass values of zooplankton and phytoplankton are expressed in grams per cubic meter (g/m^3) and periphyton and benthic organisms in grams per square meter (g/m^2).

Dry mass refers to the mass of residue present after drying in an oven at 60°C for zooplankton and 105°C for periphyton, until the mass remains unchanged. This mass represents the total organic matter, ash and sediment, in the sample. Dry mass values are expressed in the same units as ash mass.

Organic mass or volatile mass of the living substance is the difference between the dry mass and the ash mass, and represents the actual mass of the living matter. The organic mass is expressed in the same units as for ash mass and dry mass.

Wet mass is the mass of living matter plus contained water.

Bottom material: See Bed material.

Cells/volume refers to the number of cells of any organism which is counted by using a microscope and grid or counting cell. Many planktonic organisms are multicelled and are counted according to the number of contained cells per sample, usually milliliters (mL) or liters (L).

Cfs-day is the volume of water represented by flow of 1 cubic foot per second for 24 hours. It is equivalent to 86,400 cubic feet, approximately 1.9835 acre-feet, about 646,000 gallons or 2,447 cubic meters.

Chemical oxygen demand (COD) is a measure of the quantity of organic matter which can be chemically oxidized in the presence of a strong oxidant.

Chlorophyll refers to the green pigments of plants. Chlorophyll a and b are the two most common pigments in plants.

Color unit is produced by one milligram per liter of platinum in the form of the chloroplatinate ion. Color is expressed in units of the platinum-cobalt scale.

Contents is the volume of water in a reservoir or lake. Unless otherwise indicated, volume is computed on the basis of a level pool and does not include bank storage.

Continuing record station is a specified site which meets one or all conditions listed:

1. When chemical samples are collected daily or monthly for 10 or more months during the water year.
2. When water temperature records include observations taken one or more times daily.

3. When sediment discharge records include periods for which sediment loads are computed and are considered to be representative of the runoff for the water year.

Control designates a feature downstream from the gage that determines the stage-discharge relation at the gage. This feature may be a natural constriction of the channel, and artificial structure, or a uniform cross section over a long reach of the channel.

Control structure as used in this report is a structure on a stream or canal that is used to regulate the flow or stage of the stream or to prevent the intrusion of salt water.

Cubic feet per second per square mile ($ft^3/s/mi^2$, CFSM) is the average number of cubic feet of water flowing per second from each square mile of area drained, assuming that the runoff is distributed uniformly in time and area.

Cubic foot per second (ft^3/s, cfs) is the rate of discharge representing a volume of 1 cubic foot passing a given point during 1 second and is equivalent to 7.48 gallons per second or 448.8 gallons per minute or 0.02832 cubic meters per second.

Depth of well:

Total depth of well is the maximum depth in feet below land surface datum (lsd) at which the well was originally finished. This depth may be slightly deeper than "depth to the bottom of sample interval" because many wells have a "tailpiece" or short length of casing installed below the well screen.

Total depth of hole is the total depth in feet below land surface datum to which the hole was drilled, regardless of the finished depth of the well.

Depth to the top of water-bearing zone is the depth in feet, based on the best available information which indicates the top of the water-bearing zone that is furnishing water to the well.

Depth to bottom of water-bearing zone is the depth in feet, based on the best available information which indicates the bottom of the water-bearing zone that is furnishing water to the well.

Depth to the top of sample interval is the uppermost point in a fully cased well at which water can enter the well. In bedded sediments this is usually the uppermost part of the screened interval. In some wells the top of the well screen is installed inside and a few feet above the bottom of the casing. Under these conditions the bottom of the casing is considered to be the top of the sample interval.

Depth to the bottom of sample interval is the lowermost point in a fully cased well at which water can enter the well.

Discharge is the volume of water (or more broadly, volume of fluid plus suspended sediment), that passes a given point within a given period of time.

Mean discharge (MEAN) is the arithmetic mean of individual daily mean discharges during a specific period.

Instantaneous discharge is the discharge at a particular instant of time.

Dissolved refers to that material in a representative water sample which passes through a 0.45 μm membrane filter. This is a convenient operational definition used by Federal agencies that collect water data. Determinations of "dissolved" constituents are made on subsamples of the filtrate.

Diversity index is a numerical expression of the evenness of distribution of aquatic organisms. The formula for diversity index is:

$$\bar{d} = -\sum_{i=1}^{s} \frac{n_i}{n} \log_2 \frac{n_i}{n}$$

Where n_i is the number of individuals per taxon, n is the total number of individuals, and s is the total number of taxa in the sample of the community. Diversity index values range from zero, when all the organisms in the sample are the same, to some positive number, when some or all of the organisms in the sample are different.

Drainage area of a stream at a specified location is that area, measured in a horizontal plane, enclosed by a topographic divide from which direct surface runoff from precipitation normally drains by gravity into the stream above the specified point. Figures of drainage area given herein include all closed basins, or noncontributing areas, within the area unless otherwise noted.

Drainage basin is a part of the surface of the earth that is occupied by a drainage system, which consists of a surface stream or body of impounded surface water together with all tributary surface stream and bodies of impounded surface water.

Gage height (G.H.) is the water-surface elevation referred to some arbitrary gage datum. Gage height is often used interchangeably with the more general term "stage," although gage height is more appropriate when used with a reading on a gage.

Gaging station is a particular site on a stream, canal, lake, or reservoir where systematic observations of gage height or discharge are obtained. When used in connection with a discharge record, the term is applied only to those gaging stations where a continuous record of discharge is obtained.

Hardness of water is a physical-chemical characteristic that is commonly recognized by the increased quantity of soap required to produce lather. It is attributable to the presence of alkaline earths (principally calcium and magnesium) and is expressed as equivalent calcium carbonate ($CaCO_3$).

High tide is the maximum height reached by each rising tide.

Hydrologic unit is a geographic area representing part or all of a surface drainage basin or distinct hydrologic feature as delineated by the Office of Water Data Coordination on the State Hydrologic Unit Maps; each hydrologic unit is identified by an 8-digit number.

Instantaneous flow rate is the flow rate at which water is removed from the well. Used with pump or flow period prior to sampling (see below) so that the exact volume of water pumped prior to sampling can be determined.

Land-surface datum is a datum plane that is approximately at the land surface at the well.

Low tide is the minimum height reached by each falling tide.

Mean high or low tide is the average of all high or low tides, respectively, over a specified period.

Metamorphic stage refers to the stage of development that an organism exhibits during its transformation from an immature form to an adult form. This developmental process exists for most insects, and the degree of difference from the immature stage to the adult form varies from relatively slight to pronounced, with many intermediates. Examples of metamorphic stages of insects are egg-larva-adult or egg-nymph-adult.

Methylene blue active substance (MBAS) is a measure of apparent detergents. This determination depends on the formation of a blue color when methylene blue dye reacts with synethetic detergent compounds.

Micrograms per gram (UG/G) is a unit expressing the concentration of a chemical element as the weight (micrograms) of the element sorbed per unit weight (gram) of sediment.

Micrograms per liter (UG/L, ug/L) is a unit expressing the concentration of chemical constituents in solution as weight (micrograms) of solute per unit volume (liter) of water. One thousand micrograms per liter is equivalent to one milligram per liter.

Milligrams per liter (MG/L, mg/L) is a unit for expressing the concentration of chemical constituents in solution. Milligrams per liter represents the weight of solute per unit volume of water. Milligrams or micrograms per liter may be converted to milliequivalents (one thousandth of a gram-equivalent weight of a constituent) per liter by multiplying by the factors in Hem (1970).

National Geodetic Vertical Datum of 1929 (NGVD of 1929). A geodetic datum derived from a general adjustment of the first order level nets of both the United States and Canada, formerly called "Mean Sea Level."

Organism is any living entity, such as an insect, phytoplankter, or zooplankter.

Organism count/area refers to the number of organisms collected and enumerated in a sample and adjusted to the number per area habitat, usually square meters (m^2), acres, or hectares. Periphyton, benthic organisms, and macrophytes are expressed in these terms.

Organism count/volume refers to the number of organisms collected and enumerated in a sample and adjusted to the number per sample volume, usually milliliters (mL) or liters (L). Numbers of planktonic organisms can be expressed in these terms.

Total organism count is the total number of organisms collected and enumerated in any particular sample.

Partial-record station is a particular site where limited streamflow data are collected systematially over a period of years for use in hydrologic analyses.

Particle size is the diameter, in millimeters (mm), of suspended sediment or bed material determined either by sieve or sedimentation methods. Sedimentation methods (pipet, bottom-withdrawal tube, visual-accumulation tube) determine fall diameter of particles in either distilled water (chemically dispersed) or in active water (the river water at the time and point of sampling).

Particle-size classification used in this report agrees with recommendations made by the American Geophysical Union Subcommittee on Sediment Terminology. The classification is as follows:

Classification	Size (mm)	Method of analysis
Clay..........	0.00024 - 0.004	Sedimentation.
Silt..........	.004 - .062	Sedimentation.
Sand..........	.062 - 2.0	Sedimentation or sieve.
Gravel........	2.0 - 64.0	Sieve.

The particle-size distributions given in this report are not necessarily representative of all particles in transport in the stream. Most of the organic material is removed and the sample is subjected to mechanical and chemical dispersion before analysis in distilled water. Chemical dispersion is not used for native-water analysis.

Percent composition is a unit for expressing the ratio of a particular part of a sample or population to the total sample or population, in terms of types, numbers, mass or volume.

Periphyton is the assemblage of microorganisms attached to and growing upon solid surfaces. While primarily consisting of algae, they also include bacteria, fungi, protozoa, rotifers, and other small organisms. Periphyton is a useful indicator of water quality.

Pesticides are chemical compounds used to control the growth of undesirable plants and animals. Major categories of pesticides include insecticides, miticides, fungicides, herbicides, and rodenticides. Since the first application of DDT as an insecticide in the early 1930's there have been almost 60,000 pesticide formulations registered, each containing at least one of the approximately 800 different basic pesticide compounds. The United States annually produces about 1 billion pounds of these compounds. Although efforts are being made to substitute many of the chlorinated hydrocarbon pesticides with more specific, fast-acting, and easily degradable compounds, chlorinated hydrocarbon pesticides are still commonly used in many areas of the country.

Picocurie (PCI, pCi) is one trillionth (1×10^{-12}) of the amount of radioactivity represented by a curie (Ci). A curie is the amount of radioactivity that yields 3.7×10^{10} radioactive disintegrations per second. A picocurie yields 2.22 dpm (disintegrations per minute).

Plankton is the community of suspended, floating, or weakly swimming organisms that live in the open water of lakes and rivers.

Phytoplankton is the plant part of the plankton. They are usually microscopic and their movement is subject to the water currents. Phytoplankton growth is dependent upon solar radiation and nutrient substances. Because they are able to incorporate as well as release materials to the surrounding water, the phytoplankton have a profound effect upon the quality of the water. They are the primary food producers in the aquatic environment, and are commonly known as algae.

Blue-green algae are a group of phytoplankton organisms having a blue pigment, in addition to the green pigment called chlorophyll. Blue-green algae often cause nuisance conditions in water.

Diatoms are the unicellular or colonial algae having a siliceous shell. Their concentrations are expressed as number of cells per milliliter of sample.

Green algae have chlorophyll pigments similar in color to those of higher green plants. Some forms produce algal mats or floating "moss" in lakes. Their concentrations are expressed as number of cells per milliliter of sample.

Zooplankton is the animal part of the plankton. Zooplankton are capable of extensive movements within the water column, and are often large enough to be seen with the unaided eye. Zooplankton are secondary consumers feeding upon bacteria, phytoplankton, and detritus. Because they are the grazers in the aquatic environment, the zooplankton are a vital part of the aquatic food web. The zooplankton community is dominated by small crustaceans and rotifers.

Polychlorinated biphenyls (PCBs) are industrial chemicals that are mixtures of chlorinated biphenyl compounds having various percentages of chlorine. They are similar in structure to organochlorine insecticides.

Primary productivity is a measure of the rate at which new organic matter is formed and accumulated through photosynthetic and chemosynthetic activity of producer organisms (chiefly green plants). The rate of primary production is estimated by measuring the amount of oxygen released (oxygen method) or the amount of carbon assimilated by the plants (carbon method).

Milligrams of carbon per area or volume per unit time [mg C/m^2/time for periphyton and macrophytes and mg C/m^3/time for phytoplankton] are units for expressing primary productivity. They define the amount of carbon dioxide consumed as measured by radioactive carbon (carbon 14). The carbon 14 method is of greater sensitivity than the oxygen light and dark bottle method, and is preferred for use in unenriched waters. Unit time may be either the hour or day, depending on the incubation period.

Milligrams of oxygen per area or volume per unit time [mg O_2/m^2/time for periphyton and macrophytes and mg O_2/m^3/time for phytoplankton] are the units for expressing primary productivity. They define production and respiration rates as estimated from changes in the measured dissolved oxygen concentration. The oxygen light and dark bottle method is preferred if the rate of primary production is sufficient for accurate measurements to be made within 24 hours. Unit time may be either the hour or day, depending on the incubation period.

Pump or flow rate prior to sampling is used in conjunction with the instantaneous flow rate so that the exact volume of water pumped prior to sampling can be determined.

Radioisotopes are isotope forms of an element that exhibit radioactivity. Isotopes are varieties of a chemical element that differ in atomic weight, but are very nearly alike in chemical properties. The difference arises because the atoms of the isotopic forms of an element differ in the number of neutrons in the nucleus. For example: ordinary chlorine is a mixture of isotopes having atomic weights 35 and 37, with the natural mixture having an atomic weight of 35.453.

Radioisotopes that are determined in this report are natural uranium in µg/L (micrograms per liter), radium as radium-226 in PCI/L, (pCi/L, picocuries per liter), gross beta in PCI/L, and gross alpha radiation as micrograms of uranium equivalent per liter (µg/L). Gross alpha and beta radioactivity associated with the fine grained (silt and clay sized) sediments in the samples are also determined.

River mile as used herein, is the distance above the mouth of Delaware Bay, measured along the center line of the navigation channel or the main stem of the Delaware River. River mile data were furnished by the Delaware River Basin Commission.

Runoff in inches (IN, in) shows the depth to which the drainage area would be covered if all the runoff for a given time period were uniformly distributed on it.

Sediment is solid material that originates mostly from disintegrated rocks and is transported by, suspended in, or deposited from water; it includes chemical and biochemical precipitates and decomposed organic material such as humus. The quantity, characteristics, and cause of the occurrence of sediment in streams are influenced by environmental factors. Some major factors are degree of slope, length of slope, soil characteristics, land usage, and quantity and intensity of precipitation.

Supended sediment is the sediment that at any given time is maintained in suspension by the upward components of turbulent currents or that exists in suspension as a colloid.

Suspended-sediment concentration is the velocity-weighted concentration of suspended sediment in the sampled zone (from the water surface to a point approximately 0.3 ft above the bed) expressed as milligrams of dry sediment per liter of water-sediment mixture (mg/L).

Suspended-sediment discharge (tons) is the rate at which dry weight of sediment passes a section of a stream or is the quantity of sediment, as measured by dry weight, or by volume, that is discharged in a given time. It is computed by multiplying discharge times mg/L times 0.0027.

Suspended-sediment load is quantity of suspended sediment passing a section in a specified period.

Total sediment discharge (tons/day) is the sum of the suspended-sediment discharge and the bed-load discharge. It is the total quantity of sediment, as measured by dry weight or volume, that passes a section during a given time.

Mean concentration is the time-weighted concentration of suspended sediment passing a stream section during a 24-hour day.

Solute is any substance derived from the atmosphere, vegetation, soil, or rocks that is dissolved in water.

Specific conductance is a measure of the ability of a water to conduct an electrical current and is expressed in micromhos per centimeter at 25°C. Because the specific conductance is related to the number and specific chemical types of ions in solution, it can be used for approximating the dissolved-solids content of the water. Commonly, the amount of dissolved solids (in milligrams per liter) is about 65 percent of the specific conductance (in micromhos per cm at 25°C). This relation is not constant from stream to stream or from well to well, and it may even vary in the same source with changes in the composition of the water.

Stage-discharge relation is the relation between gage height and the amount of water flowing in a channel, expressed as volume per unit of time.

Streamflow is the discharge that occurs in a natural channel. Although the term "discharge" can be applied to the flow of a canal, the word "streamflow" uniquely describes the discharge in a surface stream course. The term "streamflow" is more general than "runoff." Streamflow may be applied to discharge whether or not it is affected by diversion or regulation.

Substrate is the physcial surface upon which an organism lived.

Natural substrate refers to any naturally occurring emersed or submersed solid surface, such as a rock or tree, upon which an organism lived.

Artificial substrate is a device which is purposely placed in a stream or lake for colonization by organisms. The artificial substrate simplifies the community structure by standardizing the substrate from which each sample is taken. Examples of artificial substrates are basket samplers (made of wire cages filled with clean streamside rocks) and multi-plate samplers (made of hardboard) for benthic organism collection, and plexiglass strips for periphyton collection.

Surface area of a lake is that area outlined on the latest U.S.G.S. topographic map as the boundary of the lake and measured by a planimeter in acres. In localities not covered by topographic maps, the areas are computed from the best maps available at the time planimetered. All areas shown are those for the stage when the planimetered map was made.

Surficial bed material is that part (0.1 to 0.2 ft) of the bed material that is sampled using U.S. Series Bed-Material Samplers.

Suspended, recoverable is the amount of a given constituent that is in solution after the part of a representative water-suspended sediment sample that is retained on a 0.45 um membrane filter has been digested by a method (usually using a dilute acid solution) that results in dissolution of only readily soluble substances Complete dissolution of all the particulate matter is not achieved by the digestion treatment and thus the determination represents something less than the "total" amount (that is, less than 95 percent) of the constituent present in the sample. To achieve comparability of analytical data, equivalent digestion procedures would be required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results.

Determinations of "suspended, recoverable" constituents are made either by analyzing portions of the material collected on the filter or, more commonly, by difference, based on determinations of (1) dissolved and (2) total recoverable concentrations of the constituent.

Suspended, total is the total amount of a given constituent in the part of a representative water-suspended sediment sample that is retained on a 0.45 um membrane filter. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent determined. A knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to determine when the results should be reported as "suspended, total."

Determinations of "suspended, total" constituents are made either by analyzing portions of the material collected on the filter or, more commonly, by difference, based on determinations of (1) dissolved and (2) total concentrations of the constituent.

Taxonomy is the division of biology concerned with the classification and naming of organisms. The classification of organisms is based upon a hierarchical scheme beginning with Kingdom and ending with Species at the base. The higher the classification level, the fewer features the organism have in common. For example, the taxonomy of a particular mayfly, Hexagenia limbata is the following:

Kingdom..................Animal
Phylum..............Arthropoda
Class...................Insecta
Order............Ephemeroptera
Family.............Ephemeridae
Genus.................Hexageria
Species......Hexagenia limbata

Time-weighted average is computed by multiplying the number of days in the sampling period by the concentrations of individual constituents for the corresponding period and dividing the sum of the products by the total number of days. A time-weighted average represents the composition of water that would be contained in a vessel or reservoir that had received equal quantities of water from the stream each day for the year.

Thermograph is a thermometer that continuously and automatically records, on a chart, the water temperatures of a stream. "Temperature recorder" is the term used to indicate the location of the thermograph or a digital mechanism that automatically records water temperature on paper tape.

Tons per acre-foot indicates the dry mass of dissolved solids in 1 acre-foot of water. It is computed by multiplying the concentration in milligrams per liter by 0.00136.

Tons per day is the quantity of a substance in solution or suspension that passes a stream section during a 24-hour day.

Total, recoverable is the amount of a given constituent that is in solution after a representative water-suspended sediment sample has been digested by a method (usually using a dilute acid solution) that results in dissolution of only readily soluble substances. Complete dissolution of all particulate matter is not achieved by the digestion treatment, and thus the determination represents something less than the "total" amount (that is, less than 95 percent) of the constituent present in the dissolved and suspended phases of the sample. To achieve comparability of analytical data, equivalent digestion procedures would be required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results.

Total is the total amount of a given constituent in a representative water-suspended sediment sample, regardless of the constituent's physical or chemical form. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent present in both the dissolved and suspended phases of the sample. A knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to judge when the results should be reported as "total" (Note that the word "total" does double duty here, indicating both that the sample consists of a water-suspended sediment mixture and that the analytical method determines all of the constituent in the sample).

Recoverable from bottom material is the amount of a given constituent that is in solution after a representative sample of bottom material has been digested by a method (usually using an acid or mixture of acids) that results in dissolution of only readily soluble substances. Complete dissolution of all bottom material is not achhieved by the digestion treatment and thus the determination represents less than the total amount (that is, less than 95 percent) of the constituent in the sample. To achieve comparability of analytical data, equivalent digestion procedures would be required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results.

Total in bottom material the total amount of a given constituent in a representative sample of bottom material. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent determined. A knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to judge when the results should be reported as "total in bottom material."

Total load (tons) is the total quantity of any individual constituent, as measured by dry mass or volume, that is being transported in a specific amount of water (discharge) during a given time. It is computed by multiplying the total discharge, times the mg/L of the constituent, times the factor 0.0027, times the number of days.

Unique well number is a hyphenated, 6-digit identification number which is assigned to all New Jersey wells in the Ground Water Site Inventory (GWSI) System. This numbering system was developed in 1978 to simplify identification of wells. The first two digits are a code for the county in which the well is located, and the last four digits are a sequence number. These unique well numbers are being used now in the ground-water level descriptions, wells sampled for water-quality analyses, and on the corresponding location maps in these reports.

Weighted average is used in this report to indicate discharge-weighted average. It is computed by multiplying the discharge for a sampling period by the concentrations of individual constituents for the corresponding period and dividing the sum of the products by the sum of the discharges. A discharge-weighted average approximates the composition of water that would be found in a reservoir containing all the water passing a given location during the water year after thorough mixing in the reservoir.

WDR is used as an abbreviation for "Water-Data Report" in the summary REVISIONS paragraph to refer to previously published State annual basic-data reports. Prior to 1975, WRD was used, which was the abbreviation for "Water-Resources Data."

WSP is used as an abbreviation for "Water-Supply Paper" in reference to previously published reports.

DOWNSTREAM ORDER AND STATION NUMBER

Since October 1, 1950, the order of listing hydrologic-station records in Survey reports is in a downstream direction along the main stream. All stations on a tributary entering upstream from a main-stream station are listed before that station. A station on a tributary that enters between two main-stream stations is listed between them. A similar order is followed in listing stations on first rank, second rank, and other ranks of triburtaries. The rank of any tributary on which a station is situated with respect to the stream to which it is immediately tributary is indicated by an indention in a list of stations in front of the report. Each indention represents one rank. This downstream order and system of indention show which stations are on tributaries between any two stations and the rank of the tributary on which each station is situated.

As an added means of identification, each hydrologic station and partial-record station has been assigned a station number. These are in the same downstream order used in this report. In assigning station numbers, no distinction is made between partial-record stations and other stations; therefore, the station number for a partial-record station indicates downstream-order position in a list made up of both types of stations. Gaps are left in the series of numbers to allow for new stations that may be established; hence, the numbers are not consecutive. The complete 8-digit number for each station such as 01463500, which appears just to the left of the station name, includes the 2-digit part number "01" plus the 6-digit downstream order number "463500."

NUMBERING SYSTEM FOR WELLS AND MISCELLANEOUS SITES

The 8-digit downstream order station numbers are not assigned to wells and miscellaneous sites where only random water-quality samples or discharge measurements are taken.

The wells and miscellaneous site numbering system of the U.S. Geological Survey is based on the grid system of latitude and longitude. The system provides the geographic location of the well or miscellaneous site and a unique number for each site. The number consists of 15 digits. The first 6 digits denote the degrees, minutes, and seconds of latitude, the next 7 digits denote degrees, minutes, and seconds of longitude, and the last 2 digits is a sequential number for wells within a 1-second grid. In the event that the latitude-longitude coordinates for a well and a miscellaneous site are the same, they are assigned sequential numbers "01", "02", etc. as one would for wells. See figure 1 below.

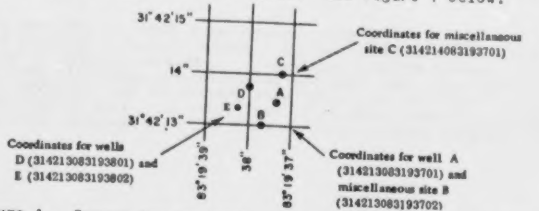
31°42'15"
Coordinates for miscellaneous site C (314214083193701)
C
14"
D
A
E
B
31°42'13"
Coordinates for wells D (314213083193801) and E (314213083193802)
83°19'39"
38"
83°19'37"
Coordinates for well A (314213083193701) and miscellaneous site B (314213083193702)

Figure 1. System for numbering wells and miscellaneous sites (latitude and longitude)

SPECIAL NETWORKS AND PROGRAMS

Some of the stations for which data are published in this report are included in special networks and programs. These stations are identified by their title, set in parentheses, under the station name.

Hydrologic bench-mark station is one that provides hydrologic data for a basin in which the hydrologic regimen will likely be governed solely by natural conditions. Data collected at a bench-mark station may be used to separate effects of natural from manmade changes in other basins which have been developed and in which the physiography, climate, and geology are similar to those in the undeveloped bench-mark basin.

National stream-quality accounting network (NASQAN) is a data collection network designed by the U.S. Geological Survey to meet many of the information demands of agencies or groups involved in national or regional water-quality planning and management. Both accounting and broad-scale monitoring objectives have been incorporated into the network design. Areal configuration of the network is based on river-basin accounting units (identified by 8-digit hydrologic-unit numbers) designated by the Office of Water Data Coordination in consultation with the Water Resources Council. Primary objectives of the network are (1) to depict areal variability of streamflow and water-quality conditions nationwide on a year-by-year basis and (2) to detect and assess long-term changes in streamflow and stream quality.

Pesticide program is a network of regularly sampled water-quality stations where samples are collected to determine the concentration and distribution of pesticides in stream where potential contamination could result from the application of the commonly used insecticides and herbicides. Operation of the network is a Federal interagency activity.

Radiochemical program is a network of regularly sampled water-quality stations where samples are collected to be analyzed for radioisotopes. The streams that are sampled represent major drainage basins in the conterminous United States.

EXPLANATION OF STAGE AND WATER-DISCHARGE RECORDS

Collection and computation of data

The base data collected at gaging stations consist of records of stage and measurements of discharge of streams or canals, and stage, surface area, and contents of lakes or reservoirs. In addition, observations of factors affecting the stage-discharge relation or the stage-capacity relation, weather records, and other information are used to supplement base data in determining the daily flow or volume of water in storage. Records of stage are obtained from either direct readings on a nonrecording gage or from a water-stage recorder that gives either a continuous graph of the fluctuations or a tape punched at selected time intervals. Measurements of discharge are made with a current meter, using the general methods adopted by the Geological Survey. These methods are decribed in standard text-books, in Water-Supply Paper 888, and in U.S. Geological Survey Techniques of Water Resources Investigations, book 3, chapter A6.

For stream-gaging stations, rating tables giving the discharge for any stage are prepared from stage-discharge relation curves. If extensions to the rating curves are necessary to express discharge greater than measured, they are made on the basis of indirect measurements of peak discharge (such as slope-area or contracted-opening measurements, computation of flow over dams or weirs), step-backwater techniques, velocity-area studies, and logarithmic plotting. The daily mean discharge is computed from gage heights and rating tables, then the monthly and yearly mean discharge are computed from the daily figures. If the stage-discharge relation is subject to change because of frequent or continual change in the physical features that form the control, the daily mean discharge is computed by the shifting-control method, in which correction factors based on individual discharge measurements and notes by engineers and observers are used in applying the gage heights to the rating tables. If the stage-discharge relation for a station is temporarily changed by the presence of aquatic growth or debris on the control, the daily mean discharge is computed by what is basically the shifting-control method.

At some stream-gaging stations the stage-discharge relation is affected by backwater from reservoirs, tributary streams, or other sources. This necessitates the use of the slope method in which the slope or fall in a reach of the stream is a factor in determining discharge. The slope or fall is obtained by means of an auxiliary gage set at some distance from the base gage. At some stations the stage-discharge relation is affected by changing stage; at these stations the rate of change in stage is used as a factor in determining discharge.

At some northern stream-gaging stations the stage-discharge relation is affected by ice in the winter, and it becomes impossible to compute the discharge in the usual manner. Discharge for periods of ice effect is computed on the basis of the gage-height record and occasional winter discharge measurements, consideration being given to the available information on temperature and precipitation, notes by gage observers and hydrologists, and comparable records of discharge for other stations in the same or nearby basins.

For a lake or reservoir station, capacity tables giving the contents for any stage are prepared from stage-area relation curves defined by surveys. The application of the stage to the capacity table gives the contents, from which the daily, monthly, or yearly change in contents is computed. Discharge over spillways is computed from a stage-discharge relation curve defined by discharge measurements.

If the stage-capacity curve is subject to changes because of deposition of sediment in the reservoir, periodic resurveys of the reservoir are necessary to define new stage-capacity curves. During the period between reservoir surveys the computed contents may be increasingly in error due to the gradual accumulation of sediment.

For some gaging stations there are periods when no gage-height record is obtained or the recorded gage height is so faulty that it cannot be used to compute daily discharge or contents. This happens when the recorder stops or otherwise fails to operate properly, intakes are plugged, the float is frozen in the well, or for various other reasons. For such periods the daily discharge are estimated on the basis of recorded range in stage, adjoining good record, discharge measurements, weather records, and comparison with other station records from the same or nearby basins. Likewise daily contents may be estimated on the basis of operator's log, prior and subsequent records, inflow-outflow studies, and other information.

The data in this report generally comprise a description of the station and tabulations of daily and monthly figures. For gaging stations on streams or canals a table showing the daily discharge and monthly and yearly discharge is given. For gaging stations on lakes and reservoirs a monthly summary table of stage and contents or a table showing the daily contents is given. Tables of daily mean gage height are included for some streamflow stations and for some reservoir stations. Records are published for the water year, which begins on October 1 and ends on September 30.

The description of the gaging station gives the location, drainage area, period of record, notations of revisions of previously published records, type and history of gages, general remarks, average discharge, and extremes of discharge or contents. The location for the gaging station and the drainage area are obtained from the most accurate maps available. River mileage, given under "LOCATION" for some stations, is that determined and used by the Corps of Engineers or other agencies. Periods for which there are published records for the present stations or for stations generally equivalent to the present one are given under "PERIOD OF RECORD."

Previously published streamflow records of some stations have been found to be in error on the basis of data or information later obtained. Revisions of such records are usually published along with the current records in one of the annual or compilation reports. In order to make it easier to find such revised records, a paragraph headed "REVISED RECORDS" has been added to the description of all stations for which revised records have been published. Listed therein are all the reports in which revisions have been published, each followed by the water years for which figures are revised in that report. In listing the water years only one number is given; for instance, 1965 stands for the water year October 1, 1964, to September 30, 1965. If no daily, monthly, or annual figures of discharge are affected by the revision, the fact is brought out by notations after the year dates as follows: "(M)" means that only the instantaneous maximum discharge was revised; "(m)" that only the instantaneous minimum was revised; and "(P)" that only peak discharges were revised. If the drainage area has been revised, the report in which the revised figure was first published is given. It should be noted that for all stations for which cubic feet per square mile and runoff in inches are published, a revision of the drainage area necessitates corresponding revision of all figures based on the drainage area. Revised figures of cubic feet per second per square mile and runoff in inches resulting from a revision of the drainage area only are usually not published in the annual series of reports.

The type of gage currently in use; the datum of the present gage referred to National Geodetic Vertical Datum; and a condensed history of the types, locations, and datums of previous gages used during the period of record are given under "GAGE." National Geodetic Vertical Datum is explained in "DEFINITION OF TERMS."

Information pertaining to the accuracy of the discharge records and to conditions which affect the natural flow of the gaging station is given under "REMARKS."

The average discharge for the number of years indicated is given under "AVERAGE DISCHARGE"; it is not given for stations having fewer than 5 complete years of record or for stations where changes in water development during the period of record cause the figure to have little significance. In addition, the median of yearly mean discharges is given for stream-gaging stations having 10 or more complete years of record if the median differs from the average by more than 10 percent. Under "EXTREMES" are given first the extremes for current year, second, the extremes for the period of record, and last information available outside the period of record. Unless otherwise qualified, the maximum discharge (or contents) is the instantaneous maximum corresponding to the crest-stage obtained by use of a water-stage recorder (graphic or digital), a crest-stage gage, or a nonrecording gage read at the time of the crest. If the maximum gage height did not occur on the same day as the maximum discharge (or contents), it is given separately. Similarly, the minimum is the instantaneous minimum unless otherwise qualified. For some stations peak discharges are listed witn EXTREMES FOR THE CURRENT YEAR; if they are, all independent peaks, including the maximum for the year, above the selected base with the time of occurrence and corresponding gage heights are published in tabular format. The base discharge, which is given in the table heading, is selected so that an average of about three peaks a year will be presented. Peak discharges are not published for any canals, ditches, drains, or for any stream for which the peaks are subject to substantial control by man. Time of day is expressed in 24-hour local standard time; for example, 12:30 a.m. is 0030, 1:30 p.m. is 1330. The minimums for these stations are published in a separate paragraph following the table of peaks.

Skeleton rating tables are published, immediately following EXTREMES, for stream-gaging stations where they serve a useful purpose and the dates of applicability can be easily identified.

The daily table for stream-gaging stations gives the mean discharge for each day and is followed by monthly and yearly summaries. In the monthly summary below the daily table, the line headed "TOTAL" gives the sum of the daily figures. The lines headed "MAX" and "MIN" give the maximum and minimum daily discharges, respectively, for the month. Discharge for the month also may be expressed in cubic feet per second per square mile (line headed "CFSM"), or in inches (line headed "IN"). Figures for cubic feet per second per square mile and runoff in inches are omitted if there is extensive regulation or diversion, if the drainage area includes large noncontributing areas, or if the average annual rainfall over the drainage basin is usually less than 20 inches. In the yearly summary below the monthly summary, the figures shown are the appropriate daily discharges for the calendar and water years.

Footnotes to the table of daily discharge are introduced by word "NOTE." Footnotes are used to indicate periods for which the discharge is computed or estimated by special methods because of no gage-height record, backwater from various sources, or other unusual conditions. Periods of no gage-height record are indicated if the period is continuous for a month or more or includes the maximum discharge for the year. Periods of backwater from an unusual source, of indefinite stage-relation, or of any other unusual condition at the gage site are indicated only if they are a month or more in length and the accuracy of the records is affected. Days on which the stage-discharge relation is affected by ice are not indicated. The methods used in computing discharge for various unusual conditions have been explained in preceding paragraphs.

For most gaging stations on lakes and reservoirs the data presented comprise a description of the station and a monthly summary table of stage and contents. For some reservoirs a table showing daily contents or stage is given. A skeleton table of capacity at given stages is published for all reservoirs for which records are published on a daily basis, but is not published for reservoirs for which only monthly data are given.

Data collected at partial-record stations follow the information for continuous record sites. Data for partial-record discharge stations are presented in two tables. The first is a table of discharge measurements at low-flow partial-record stations, and the second is a table of annual maximum stage and discharge at crest-stage stations. The tables of partial-record stations are followed by a listing of discharge measurements made at sites other than continuous-record or partial-record stations. Occasionally, a series of discharge measurements are made within a short time period to investigate the seepage gains or losses along a reach of a stream or to determine the low-flow characteristics of an area. Such measurements are also given in special tables following the tables of partial-record stations.

Accuracy of field data and computed results

The accuracy of streamflow data depends primarily on (1) the stability of the stage-discharge relation or, if the control is unstable, the frequency of discharge measurements, and (2) the accuracy of observations of stage, measurements of discharge, and interpretation of records.

The station description under "REMARKS" states the degree of accuracy of the records. "Excellent" means that about 95 percent of the daily discharges are within 5 percent; "good" within 10 percent; and "fair" within 15 percent. "Poor" means that daily discharges have less than "fair" accuracy.

Figures of daily mean discharge in this report are shown to the nearest hundredth of a cubic foot per second for discharges of less than 1 cfs; to tenths between 1.0 and 10 cfs; to whole numbers between 10 and 1,000 cfs; and to 3 significant figures above 1,000 cfs. The number of significant figures used is based solely on the magnitude of the figure. The same rounding rules apply to discharge figures listed for partial-record stations and miscellaneous sites.

Discharge at many stations, as indicated by the monthly mean, may not reflect natural runoff due to the effects of diversion, consumption, regulation by storage, increase or decrease in evaporation due to artificial causes, or to other factors. For such stations, figures of cubic feet per second per square mile and of runoff in inches are not published unless satisfactory adjustments can be made for diversions, for changes in contents of reservoirs, or for other changes incident to use and control. Evaporation from a reservoir is not included in the adjustments for changes in reservoir contents, unless it is so stated. Even at those stations where adjustments are made, large errors in computed runoff may occur if adjustments or losses are large in comparison with the observed discharge.

Publications

Each volume of the 1960 series of U.S. Geological Survey water-supply papers entitled "Surface Water Supply of the United States" contains a listing of the numbers of all water-supply papers in which records of surface-water data were published for the area covered by the individual volumes. Each volume also contains a list of water-supply papers that give detailed information on major floods for the area. A new series of water-supply papers containing surface-water record for the 5-year period October 1, 1965 to September 30, 1970, also will include lists of annual and special reports published as water-supply papers.

Records through September 1950 for the area covered by this report have been compiled and published in Water-Supply Paper 1302; records for October 1950 to September 1960 have been compiled and published in Water-Supply Paper 1722; records for October 1960 to September 1965 have been compiled and published in Water-Supply Paper 1902; records for October 1965 to September 1970 have been compiled and published in Water-Supply Paper 2102. These reports contain summaries of monthly and annual discharge and month-end storage for all previously published records, as well as some records not contained in the annual series of water-supply papers. All records were reexamined and revised where warranted. Estimates of discharge were made to fill short gaps whenever practical. The yearly summary table for each gaging station lists the numbers of the water-supply papers in which daily records were published for that station.

Special reports on major floods or droughts or of other hydrologic studies for the area have been issued in publications other than water-supply papers. Information relative to these reports may be obtained from the district office.

Other data available

Information of a more detailed nature than that published for most of the gaging stations such as observations of water temperatures, discharge measurements, gage-height records, and rating tables is on file in the district office. Also most gaging-station records are available in computer-usable form and many statistical analyses have been made.

Information on the availability of unpublished data or statistical analyses may be obtained from the district office.

Records of stage or discharge collected by agencies other than the Geological Survey

Records of stage or discharge not published by the Geological Survey were collected in New Jersey at 30 sites during the water years October 1960 to current year by the following agencies: records at 4 sites were collected by the North Jersey District Water Supply Commission; at 14 sites by Passaic County, at 1 sites by the National Weather Service; at 3 sites by the National Ocean Survey; at 3 sites by the Corps of Engineers, and 5 sites by Delaware River Joint Toll Bridge Commission. The National Water Data Exchange, Water Resources Division, U.S. Geological Survey, National Center, Reston, VA 22092, maintain an index of such sites. Information on records available at specific sites can be obtained upon request.

EXPLANATION OF WATER-QUALITY RECORDS

Collection and examination of data

Water samples for analyses usually are collected at or near gaging stations. The discharge records at these stations are used in conjunction with the computations of the chemical constituents and sediment loads.

The data in this report include a description of the sampling station and tabulations of the samples analyzed. The description of the sampling station gives the location, drainage area, periods of record for the water-quality data, extremes of the pertinent data, and general remarks. For ground-water sampling stations, no descriptive statements are presented. However, the well number, depth of well, date of sampling, and other pertinent data are given in the table containing the chemical analyses of ground water.

Water-quality information is presented for chemical, biological, and microbiological quality, water temperature, and fluvial sediment. Chemical quality includes the concentrations of individual constituents and certain properties such as hardness, specific conductance, and pH. The biological information includes qualitative and quantitative analyses of plankton, bottom organisms, and particulate inorganic and amorphous matter present. Microbiological information includes quantitative identifications of certain bacteriological indicator organisms. Water-temperature data represent once-daily observations except for stations where a water-quality noncontinuous-digital monitor furnishes hourly temperature readings that provide daily maximum, minimum, and mean temperature data summaries. Fluvial-sediment information is given for suspended-sediment discharges and concentrations and for particle-size distribution of suspended sediment.

Prior to the 1968 water year, data for chemical constituents and concentrations of suspended sediment were reported in parts per million (ppm) and water temperatures were reported in degrees Fahrenheit (°F). In October 1967, the U.S. Geological Survey began reporting data for chemical constituents and concentrations of suspended sediment in milligrams per liter (mg/L) and water temperatures in degrees Celsius (°C). In waters with a density of 1.000 g/ml (grams per milliliter), parts per million and milligrams per liter can be considered equal. In waters with a density greater than 1.000 g/ml, values in parts per million should be multiplied by the density to convert to milligrams per liter. Temperatures reported in degrees Celsius may be converted to degrees Fahrenheit by using Table 1 below.

In October 1968, the Geological Survey began reporting many of the chemical constituents as well as the minor elements in micrograms per liter instead of milligrams per liter. (See "Definitions of Terms," and table for converting Inch-pound Units to International System Units, inside back cover).

Table 1.--Degrees Celsius (°C) to degrees Fahrenheit (°F)* (Temperature reported to nearest 0.5°C)

°C	°F	°C	°F	°C	°F	°C	°F	°C	°F
0.0	32	10.0	50	20.0	68	30.0	86	40.0	104
0.5	33	10.5	51	20.5	69	30.5	87	40.5	105
1.0	34	11.0	52	21.0	70	31.0	88	41.0	106
1.5	35	11.5	53	21.5	71	31.5	89	41.5	107
2.0	36	12.0	54	22.0	72	32.0	90	42.0	108
2.5	36	12.5	54	22.5	72	32.5	90	42.5	108
3.0	37	13.0	55	23.0	73	33.0	91	43.0	109
3.5	38	13.5	56	23.5	74	33.5	92	43.5	110
4.0	39	14.0	57	24.0	75	34.0	93	44.0	111
4.5	40	14.5	58	24.5	76	34.5	94	44.5	112
5.0	41	15.0	59	25.0	77	35.0	95	45.0	113
5.5	42	15.5	60	25.5	78	35.5	96	45.5	114
6.0	43	16.0	61	26.0	79	36.0	97	46.0	115
6.5	44	16.5	62	26.5	80	36.5	98	46.5	116
7.0	45	17.0	63	27.0	81	37.0	99	47.0	117
7.5	45	17.5	63	27.5	81	37.5	99	47.5	117
8.0	46	18.0	64	28.0	82	38.0	100	48.0	118
8.5	47	18.5	65	28.5	83	38.5	101	48.5	119
9.0	48	19.0	66	29.0	84	39.0	102	49.0	120
9.5	49	19.5	67	29.5	85	39.5	103	49.5	121

*°C = 5/9 (°F - 32) or °F = 9/5 (°C) + 32.

Most methods for collecting and analyzing water samples to determine the kinds and concentrations of solutes are described in the U.S. Geological Survey Techniques of Water-Resources Investigations listed at the end of this section. Analysis of pesticides, herbicides, and organic substances in water are described by Goerlitz and Brown. The collection and analysis of aquatic, biological and microbiological samples are described by Greeson and others.

One sample can define adequately the water quality at a given time if the mixture of solutes throughout the stream cross section is homogeneous. However, the concentration of solutes at different locations in the cross section may vary widely with different rates of water discharge, depending on the source of material and the turbulence and mixing of the stream. Some streams must be sampled through many vertical sections to obtain a representative sample needed for an accurate mean concentration and for use in calculating load.

Chemical-quality data published in this report are considered to be the most representative values available for the stations listed. The values reported represent water-quality conditions at the time of sampling as much as possible, consistent with available sampling techniques and methods of analysis.

For chemical-quality stations equipped with noncontinuous-digital monitors, the records consist of daily maximum, minimum, and mean values for each constituent measured and are based upon hourly punches beginning at 0100 hours and ending at 2400 hours for the day of record. More detailed records (hourly values) may be obtained from the U.S. Geological Survey district office (for address see Page IV).

The quality of ground water normally does not change significantly during short periods of time; infrequent sampling and analysis of ground water adequately defines ground-water quality at a given site. Water samples from wells are collected after prepumping the well and are analyzed individually.

Water temperature

Water temperatures are measured at most of the water-quality stations. In addition, water temperatures are taken at time of discharge measurements for surface-water stations. For daily stations, the water temperatures are taken at about the same time each day. Large streams have a small diurnal temperature change; shallow streams may have a daily range of several degrees and may follow closely the changes in air temperature. Some streams may be affected by waste-heat discharges. Influential factors, field measurement, and data representation of temperature are described by Stevens, Ficke and Smoot.

Sediment

Suspended-sediment concentrations are determined from samples collected by using depth-integrating samplers. Samples usually are obtained at several verticals in the cross-section, or a single sample may be obtained at a fixed point and a coefficient applied to determine the mean concentration in the cross section.

During periods of rapidly changing flow or rapidly changing concentration, samples may have been collected more frequently (twice daily or, in some instances, hourly). The published sediment discharges for days of rapidly changing flow or concentration were computed by the subdivided-day method (time-discharge weighted average). Therefore, for those days when the published sediment discharge value differs from the value computed as the product of discharge times mean concentration times 0.0027, the reader can assume that the sediment discharge for that day was computed by the subdivided-day method. For periods when no samples were collected, daily loads of suspended sediment were estimated on the basis of water discharge, sediment concentrations observed immediately before and after the periods, and suspended-sediment loads for other periods of similar discharge.

At other stations, suspended-sediment samples were collected periodically at many verticals in the stream cross section. Although data collected periodically may represent conditions only at the time of observations, such data are useful in establishing seasonal relations between quality and streamflow in predicting long-term sediment-discharge characteristics of the stream.

In addition to the records of the quantities of suspended sediment, records of the periodic measurements of the particle-size distribution of the suspended sediment are included.

Remark codes for water-quality data

PRINTED OUTPUT	REMARK	PRINTED OUTPUT	REMARK
E	ESTIMATED VALUE	<	ACTUAL VALUE IS KNOWN TO BE LESS THAN THE VALUE SHOWN
>	ACTUAL VALUE IS KNOWN TO BE GREATER THAN THE VALUE SHOWN	ND	MATERIAL SPECIFICALLY ANALYZED FOR BUT NOT DETECTED
K	RESULTS BASED ON COLONY COUNT OUTSIDE THE ACCEPTABLE RANGE (NON-IDEAL COLONY COUNT)		

Publications

Table 2 below, shows the annual series of water-supply papers that give information on quality of surface waters in New Jersey.

Table 2.--Water-supply paper (WSP) numbers, water years, 1945-70

Year	WSP	Year	WSP	Year	WSP
1945	1030	1954	1350	1963	1947
1946	1050	1955	1400	1964	1954
1947	1102	1956	1450	1965	1961
1948	1132	1957	1520	1966	1991
1949	1162	1958	1571	1967	2011
1950	1186	1959	1641	1968	2091
1951	1197	1960	1741	1969	2141
1952	1250	1961	1881	1970	2151
1953	1290	1962	1941		

EXPLANATION OF GROUND-WATER LEVEL RECORDS

Collection of the data

Only ground-water level data from a basic network of observation wells are published herein. This basic network contains observation wells so located that the most significant data are obtained from the fewest wells in the most important aquifers.

Each well is identified by means of (1) a 15-digit number that is based on latitude and longitude (see figure 1) and (2) a local name and a unique well number that are provided for local needs.

Water-level measurements in this report are given in feet with reference to land-surface datum (LSD, lsd). Land-surface datum is a datum plane that is approximately at land surface at each well. The altitude of the land-surface datum above NGVD 1929, and the height of the measuring point (MP) above or below land-surface datum is given in each well description.

Measurements are made in many types of wells, under varying conditions of access and at different temperatures, hence, neither the method of measurement nor the equipment can be standardized. At each observation well, however, the equipment and techniques used are those that will ensure that measurements at each well are consistent.

Water-level data in these reports were obtained from water-level recorders, water-level extremes recorders, and from periodic manual measurements. The equipment used at each well is described in the well description under the listing "Instrumentation." Water levels in wells equipped with water-level recorders are reported for every fifth day and the end of each month (eom). Beginning in the 1977 water year, water-level recorders were removed from some wells and replaced by water-level extremes recorders. The extremes are read from these recorders at about three month intervals, but the actual dates of occurrance of the extremes (highest and lowest water levels) are unknown. In these reports the extreme water levels are given along with the interim dates in the well descriptions, and the manual only measurements are tabulated below the well descriptions and also plotted in hydrographs where provided.

Water levels are reported to as many significant figures as can be justified by the local conditions. For example, in a measurement of a depth to water of several hundred feet, the error in determining the absolute value of the total depth to water may be a few tenths of a foot, wheareas the error in determining the net change of water level between successive measurements may be only a hundredth or a few hundredths of a foot. For lesser depths to water the accuracy is greater. Accordingly, most measurements are reported to a hundredth of a foot, but some are given only to a tenth of a foot or a larger unit.

Publications

Table 3 on next page, shows the series of water-supply papers that give ground-water level data for New Jersey, 1935 to 1974. No water-level data were published in 1975. Beginning in 1976, ground-water level data for New Jersey have been published in these annual water data reports.

Table 3.--Water-supply paper (WSP) numbers, water years, 1935-74

Year	WSP	Year	WSP	Year	WSP
1935	777	1944	1016	1953	1265
1936	817	1945	1023	1954	1321
1937	840	1946	1071	1955	1404
1938	845	1947	1096	1956-57	1537
1939	866	1948	1126	1958-62	1782
1940	906	1949	1156	1963-67	1977
1941	936	1950	1165	1968-72	2140
1942	986	1951	1191	1973-74	2164
1943	936	1952	1221		

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NOTE: When ordering any of these publications, please give the title, book number, chapter number, and "U.S. Geological Survey Techniques of Water-Resources Investigations".

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1-D2. *Guidelines for collection and field analysis of ground-water samples for selected unstable constituents*, by W. W. Wood: USGS--TWRI Book 1, Chapter D2. 1976. 24 pages.
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2-E1. *Application of borehole geophysics to water-resources investigations*, by W. S. Keys and L. M. MacCary: USGS--TWRI Book 2, Chapter E1. 1971. 126 pages.
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3-C1. *Fluvial sediment concepts*, by H. P. Guy: USGS--TWRI Book 3, Chapter C1. 1970. 55 pages.
3-C2. *Field methods for measurement of fluvial sediment*, by H. P. Guy and V. W. Norman: USGS--TWRI Book 3, Chapter C2. 1970. 59 pages.
3-C3. *Computation of fluvial-sediment discharge*, by George Porterfield: USGS--TWRI Book 3, Chapter C3. 1972. 66 pages.
4-A1. *Some statistical tools in hydrology*, by H. C. Riggs: USGS--TWRI Book 4, Chapter A1. 1968. 39 pages.
4-A2. *Frequency curves*, by H. C. Riggs: USGS--TWRI Book 4, Chapter A2. 1968. 15 pages.
4-B1. *Low-flow investigations*, by H. C. Riggs: USGS--TWRI Book 4, Chapter B1. 1972. 18 pages.
4-B2. *Storage analyses for water supply*, by H. C. Riggs and C. H. Hardison: USGS--TWRI Book 4, Chapter B2. 1973. 20 pages.
4-B3. *Regional analyses of streamflow characteristics*, by H. C. Riggs: USGS--TWRI Book 4, Chapter B3. 1973. 15 pages.
4-D1. *Computation of rate and volume of stream depletion by wells*, by C. T. Jenkins: USGS--TWRI Book 4, Chapter D1. 1970. 17 pages.
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5-C1. *Laboratory theory and methods for sediment analysis*, by H. P. Guy: USGS--TWRI Book 5, Chapter C1. 1969. 58 pages.
7-C1. *Finite difference model for aquifer simulation in two dimensions with results of numerical experiments*, by P. C. Trescott, G. F. Pinder, and S. P. Larson: USGS--TWRI Book 7, Chapter C1. 1976. 116 pages.
7-C2. *Computer model of two-dimensional solute transport and dispersion in ground water*, by L. F. Konikow and J. D. Bredehoeft: USGS--TWRI Book 7, Chapter C2. 1978. 90 pages.
8-A1. *Methods of measuring water levels in deep wells*, by M. S. Garber and F. C. Koopman: USGS--TWRI Book 8, Chapter A1. 1968. 23 pages.
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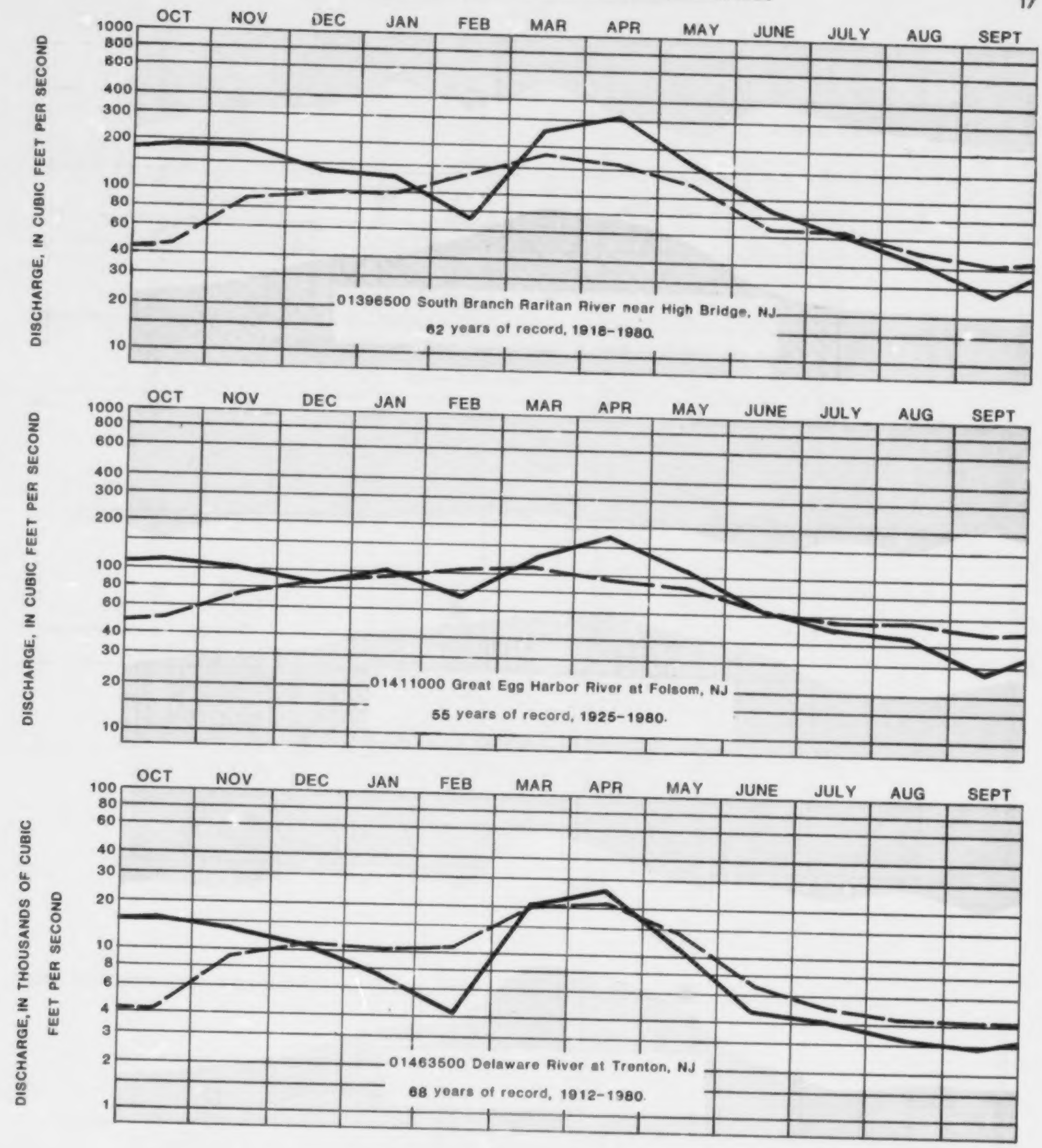


Unshaded area.--Indicates range between highest and lowest mean recorded for the month, prior to 1980 water year.

Dashed line.--Indicates normal (median of the monthly means) for the standard reference period, 1941-1970.

Solid line.--Indicates observed monthly mean flow for the 1980 water year.

FIGURE 2.--MONTHLY STREAMFLOW AT KEY GAGING STATIONS.

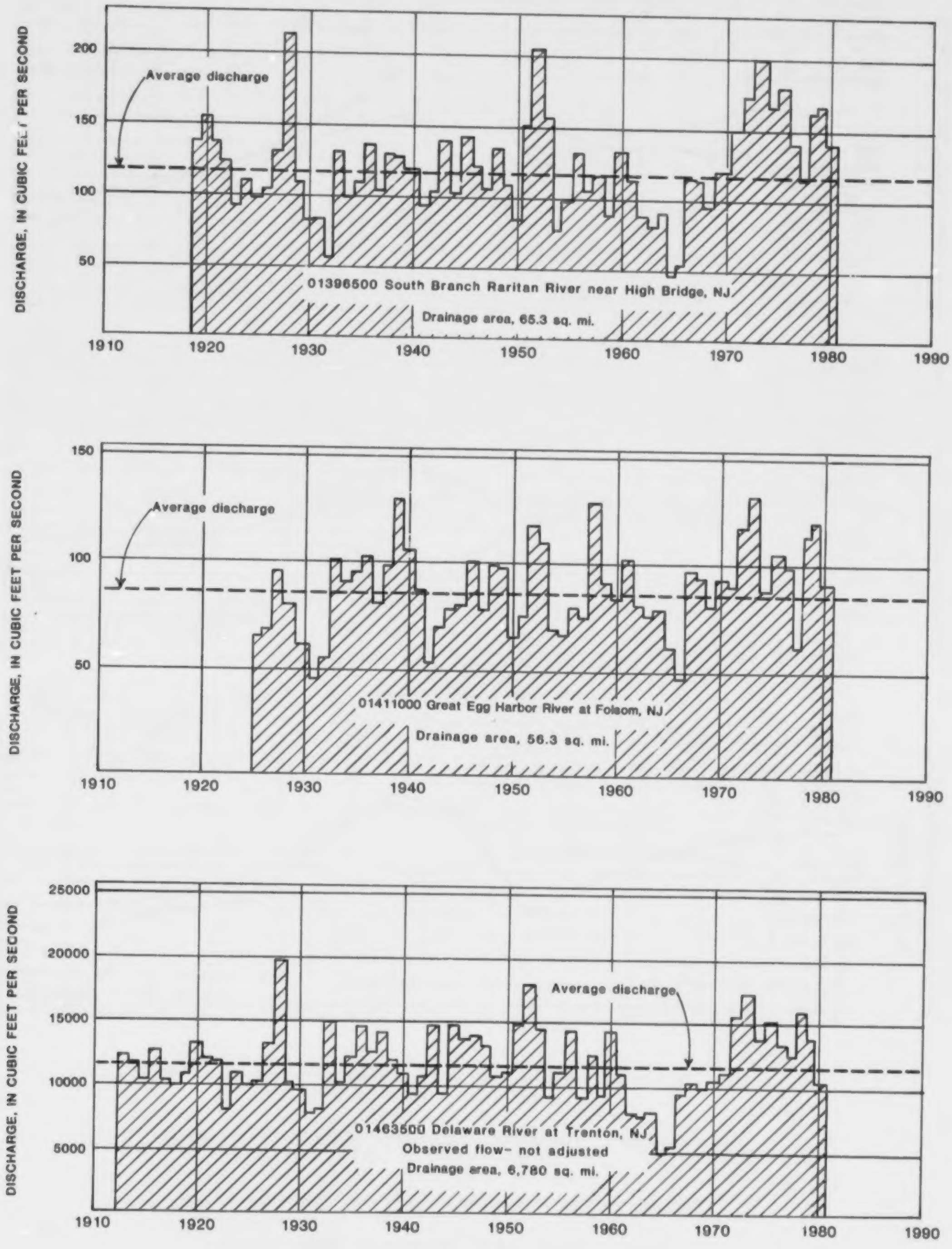
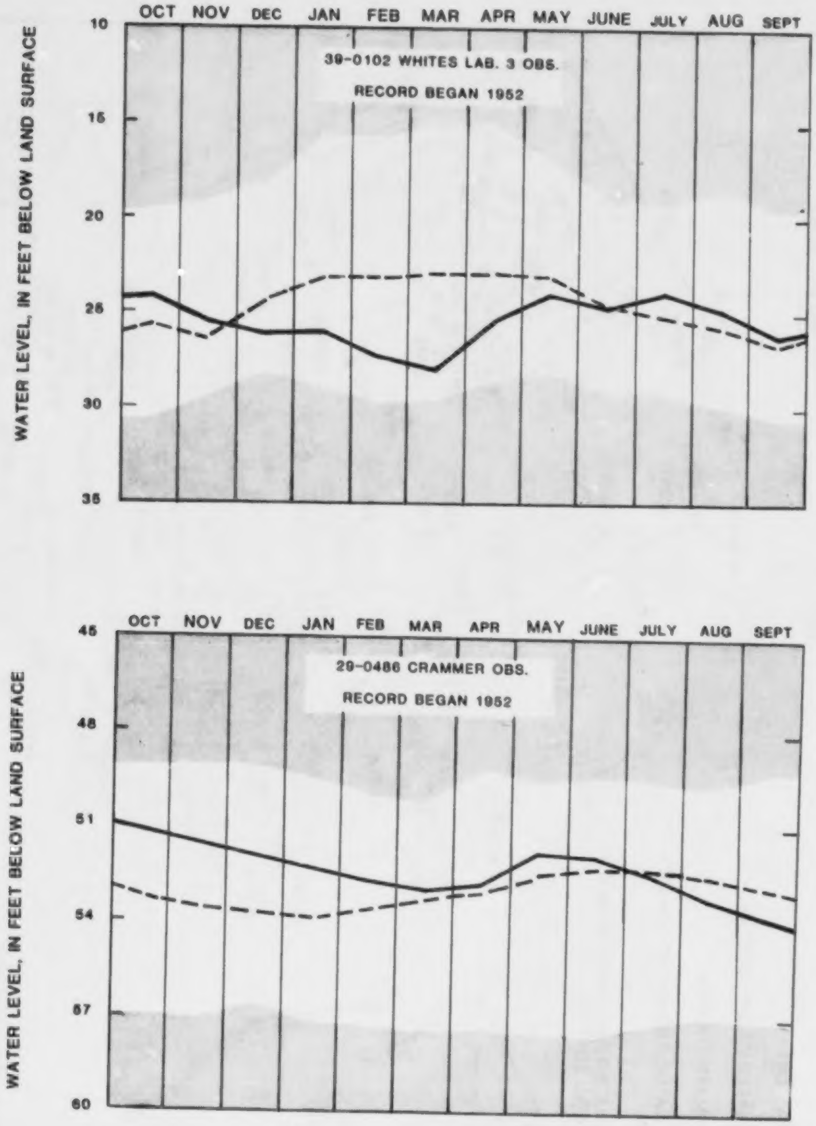


FIGURE 3.--ANNUAL MEAN DISCHARGE AT KEY GAGING STATIONS



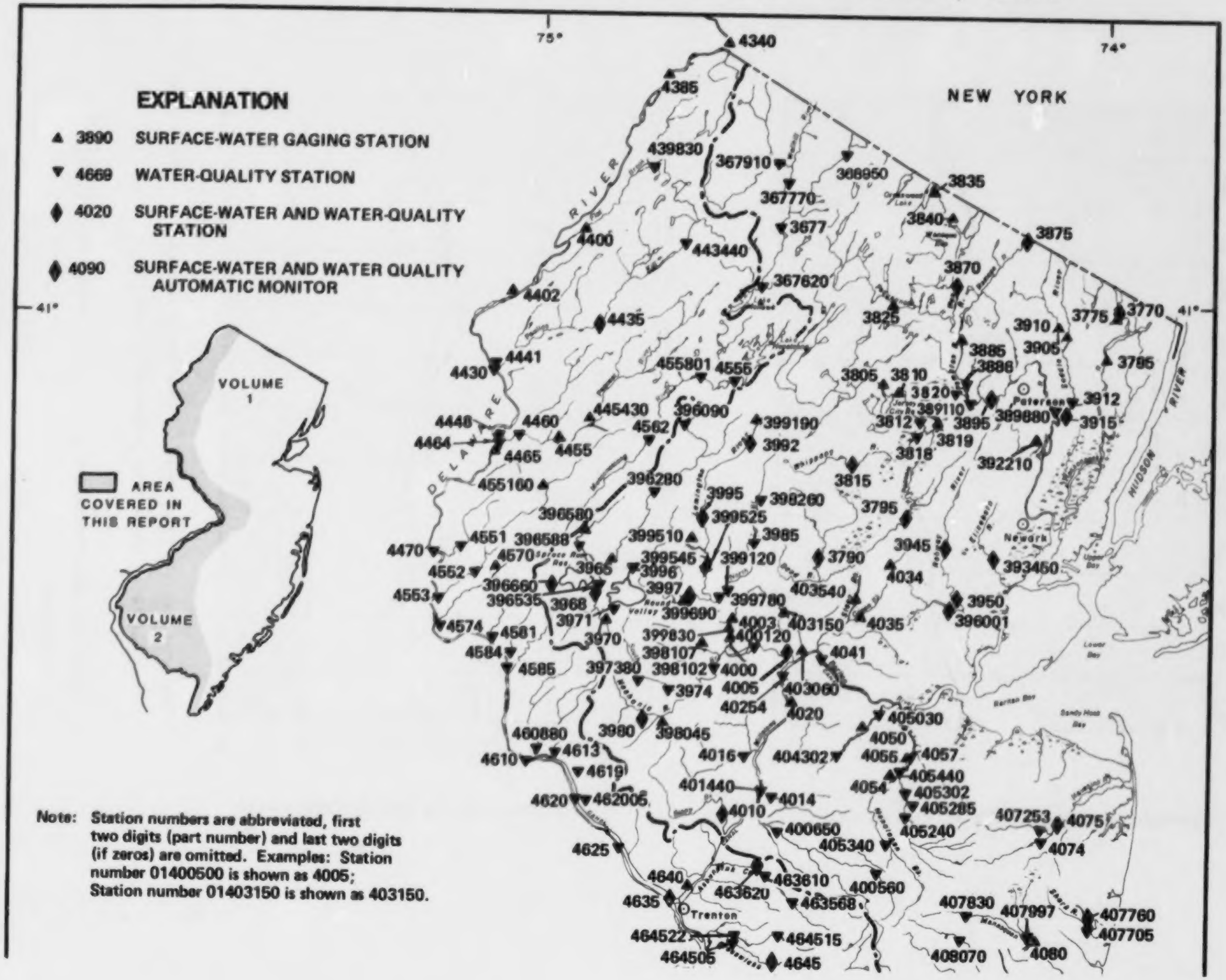
Unshaded area.--Indicates range between highest and lowest recorded monthly minimum water levels, prior to the current year.

Dashed line.--Indicates average of the monthly minimum water levels, prior to current year.

Solid line.--Indicates monthly minimum water level for the current year.

FIGURE 4.--MONTHLY GROUND - WATER LEVELS AT KEY OBSERVATION WELLS.

WATER RESOURCES DATA FOR NEW JERSEY, 1980



Note: Station numbers are abbreviated, first two digits (part number) and last two digits (if zeros) are omitted. Examples: Station number 01400500 is shown as 4005; Station number 01403150 is shown as 403150.

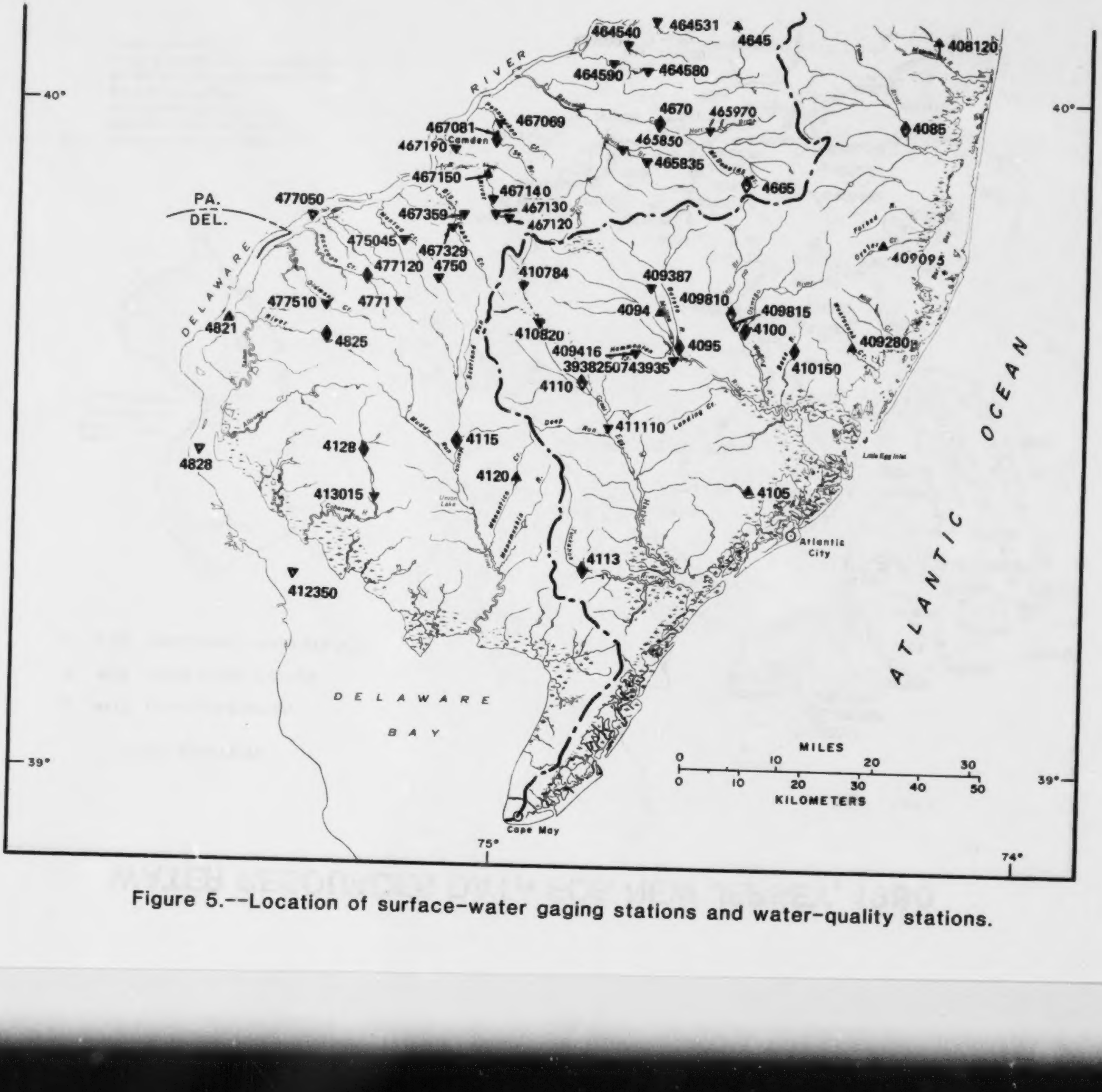
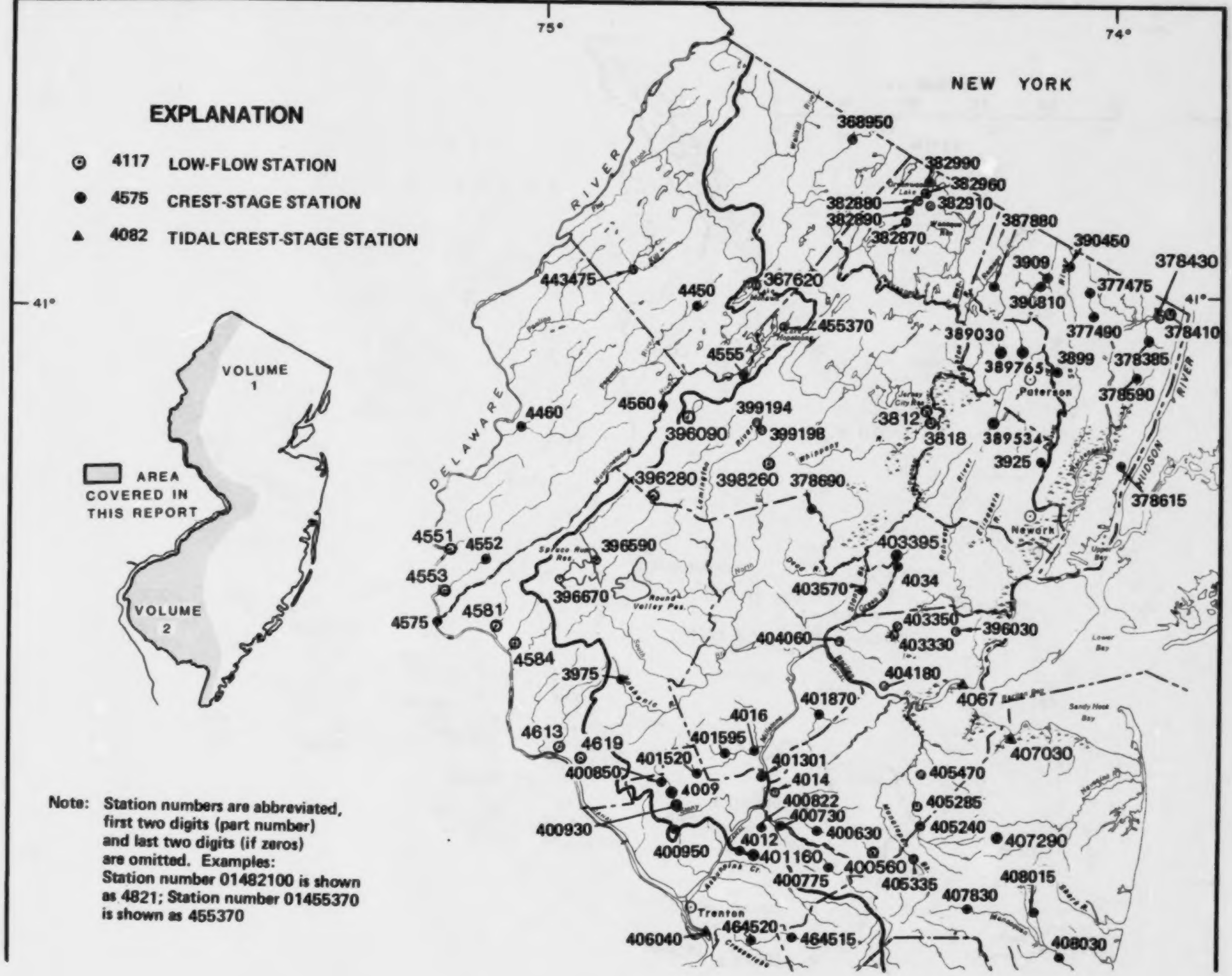


Figure 5.--Location of surface-water gaging stations and water-quality stations.

WATER RESOURCES DATA FOR NEW JERSEY, 1980



EXPLANATION

- ⊙ 4117 LOW-FLOW STATION
- ● 4575 CREST-STAGE STATION
- ▲ 4082 TIDAL CREST-STAGE STATION

▭ AREA COVERED IN THIS REPORT

Note: Station numbers are abbreviated, first two digits (part number) and last two digits (if zeros) are omitted. Examples: Station number 01482100 is shown as 4821; Station number 01455370 is shown as 455370

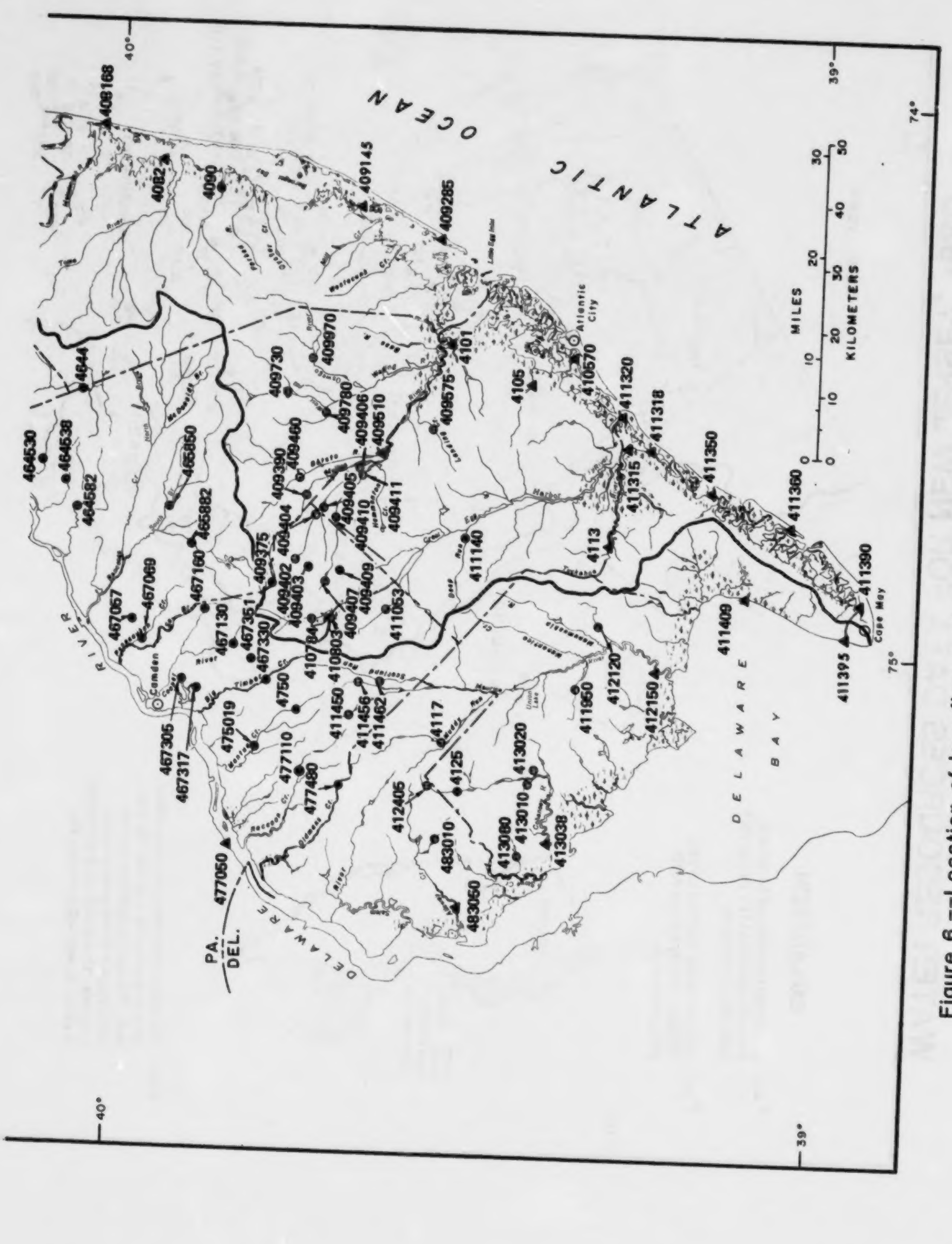
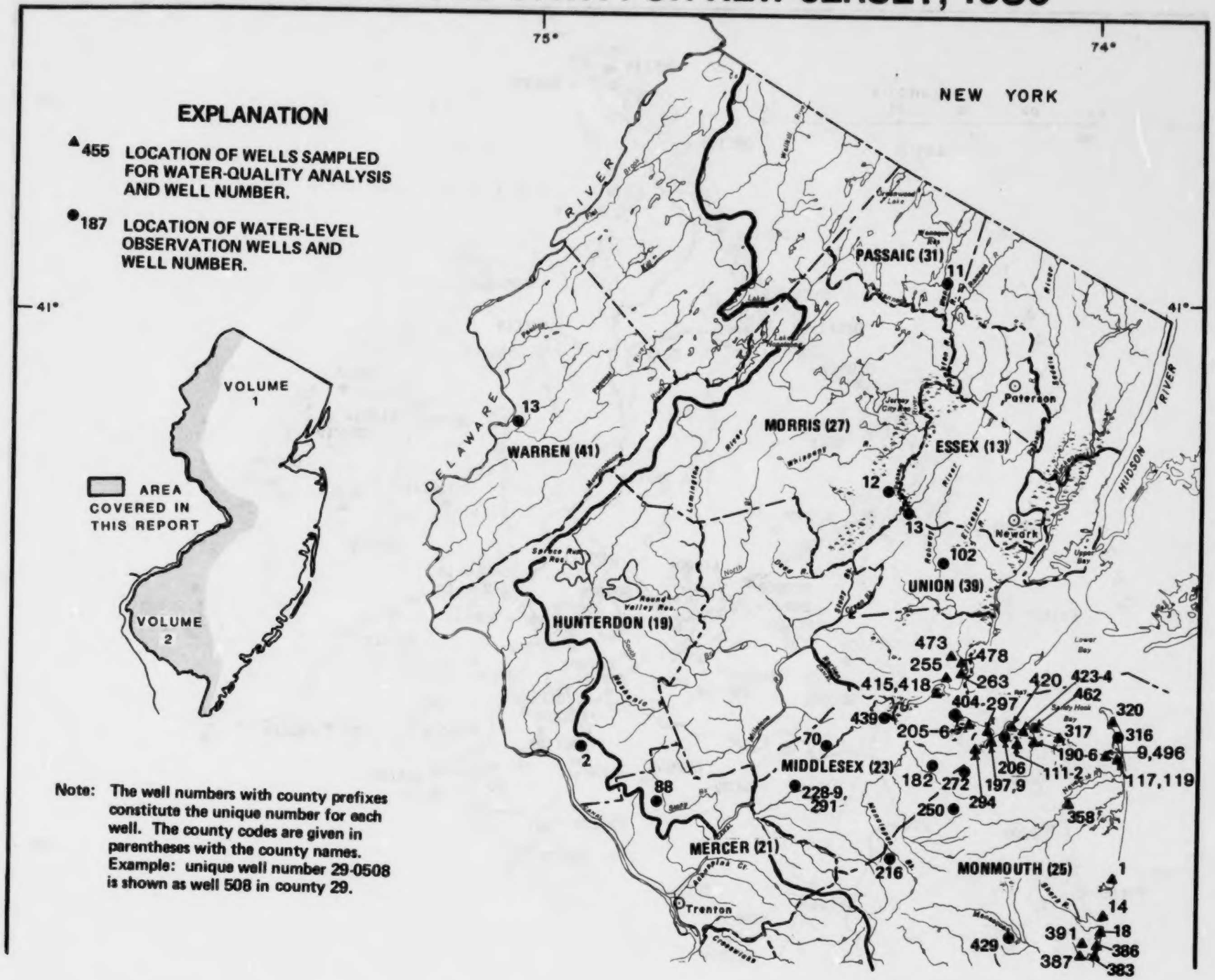


Figure 6.--Location of low-flow and crest-stage partial record stations.

WATER RESOURCES DATA FOR NEW JERSEY, 1980



EXPLANATION

▲455 LOCATION OF WELLS SAMPLED FOR WATER-QUALITY ANALYSIS AND WELL NUMBER.

●187 LOCATION OF WATER-LEVEL OBSERVATION WELLS AND WELL NUMBER.

▨ AREA COVERED IN THIS REPORT

Note: The well numbers with county prefixes constitute the unique number for each well. The county codes are given in parentheses with the county names. Example: unique well number 29-0508 is shown as well 508 in county 29.

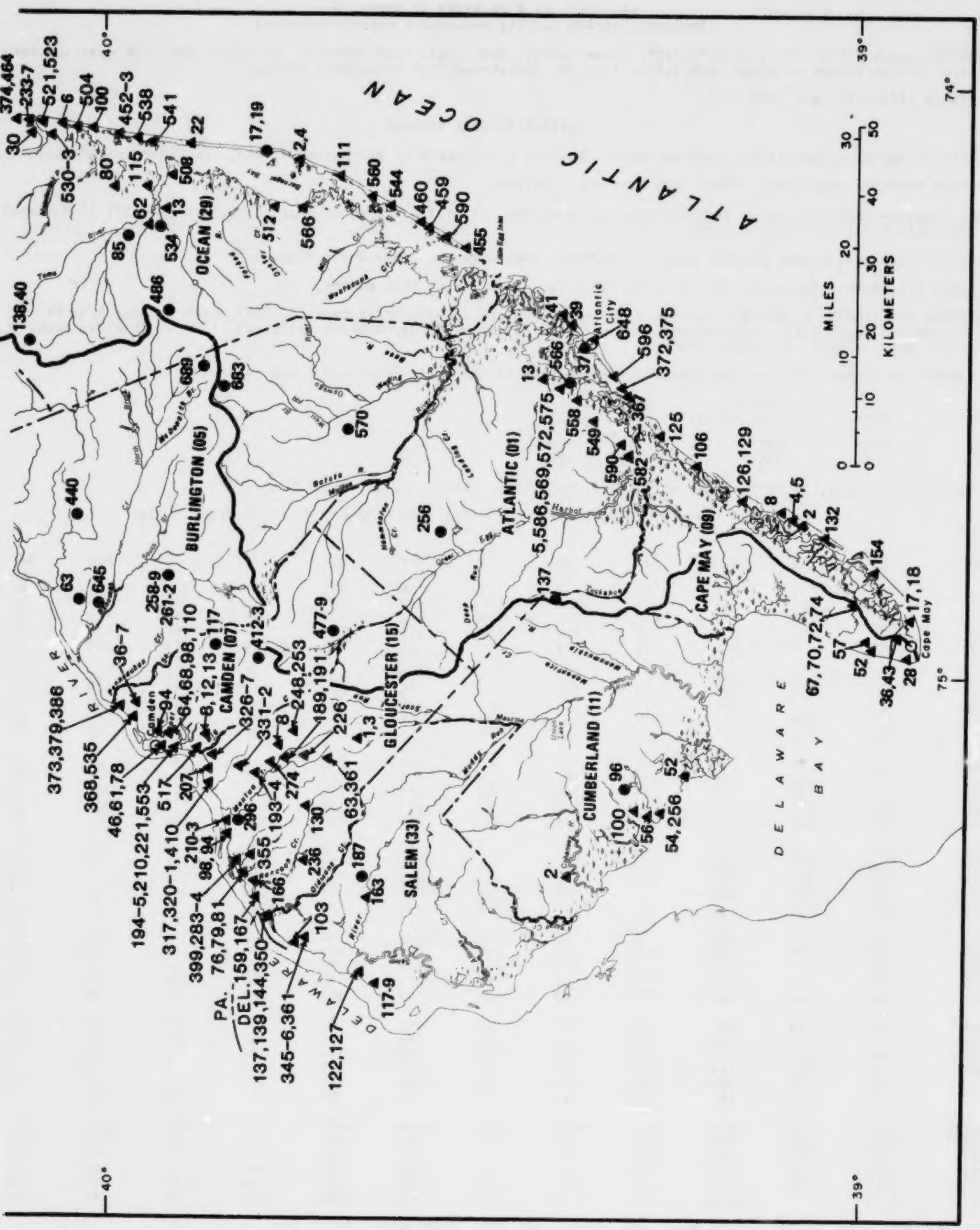


Figure 7.--Map showing location of ground-water quality stations and observation wells.

MAURICE RIVER BASIN

01411500 MAURICE RIVER AT NORMA, NJ
(National stream quality accounting network station)

LOCATION.--Lat 39°29'42", long 75°04'38", Salem County, Hydrologic Unit 02040206, on right bank just upstream from Almond Road Bridge at Norma, and 0.8 mi (1.3 km) downstream from Blackwater Branch.

DRAINAGE AREA.--113 mi² (293 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1932 to current year. Monthly discharge only for December 1933, published in WSP 1302.

REVISED RECORDS.--WSP 1382: 1933. WDR NJ-79-1: 1967(P).

GAGE.--Water-stage recorder. Concrete control since Dec. 27, 1937. Datum of gage is 46.94 ft (14.307 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Water-discharge records good. Occasional regulation by ponds above station.

AVERAGE DISCHARGE.--48 years, 169 ft³/s (4.786 m³/s), 20.32 in/yr (516 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,360 ft³/s (208 m³/s) Sept. 2, 1940, gage height, 8.72 ft (2.658 m), from rating curve extended above 3,000 ft³/s (85 m³/s); minimum daily, 23 ft³/s (0.65 m³/s) Sept. 8, 1964, July 2, Sept. 7, 11-13, 1966.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 380 ft³/s (10.8 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	(m³/s)	Gage height (ft)	(m)
Oct. 14	1000	*421	11.9	3.53	1.076
Apr. 5	0900	385	10.9	3.55	1.082

Minimum discharge, 51 ft³/s (1.44 m³/s) Sept. 1, 2, gage height, 2.38 ft (0.725 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	210	192	236	177	147	148	336	331	120	215	97	63
2	231	201	228	174	169	147	342	321	132	212	114	53
3	263	223	219	172	159	143	345	307	134	190	121	57
4	282	245	210	169	154	143	348	297	139	196	119	57
5	293	240	203	170	151	146	370	277	139	177	123	59
6	302	237	198	171	150	150	339	253	125	156	120	58
7	291	233	216	171	150	150	315	226	132	144	108	61
8	273	230	216	171	150	152	290	210	249	120	87	61
9	257	222	214	171	150	156	296	208	272	114	88	61
10	281	218	214	168	150	155	346	205	241	133	90	62
11	325	225	213	175	150	163	359	202	213	151	90	61
12	330	258	208	248	150	160	357	197	155	149	126	61
13	358	265	208	261	149	162	339	193	154	124	133	59
14	404	261	218	273	148	218	311	189	149	115	118	59
15	369	265	214	278	148	223	298	182	154	108	125	60
16	336	265	211	239	157	227	280	175	198	108	99	59
17	310	255	210	223	167	230	265	169	190	107	102	59
18	287	242	200	212	164	233	250	174	167	102	109	79
19	266	232	193	232	160	222	237	181	154	99	82	76
20	249	222	189	227	157	207	222	181	148	96	88	73
21	236	214	187	219	155	218	221	186	141	100	89	71
22	225	207	187	215	159	248	221	184	134	96	88	71
23	215	203	188	226	177	249	211	173	120	135	87	72
24	211	199	190	218	181	250	201	172	124	108	101	72
25	208	196	198	208	182	299	197	167	127	108	88	77
26	205	208	204	200	179	304	197	163	106	107	80	84
27	202	228	202	193	170	296	204	149	107	100	73	77
28	198	233	198	186	163	282	223	146	109	100	67	74
29	184	239	191	181	157	283	262	147	124	95	69	73
30	187	240	186	175	---	291	284	139	211	96	71	72
31	187	---	182	170	---	296	---	109	---	90	70	---
TOTAL	8175	6898	6331	6273	4603	6551	8466	6213	4668	3951	3022	1981
MEAN	264	230	204	202	159	211	282	200	156	127	97.5	66.0
MAX	404	265	236	278	182	304	370	331	272	215	133	84
MIN	184	192	182	168	147	143	197	109	106	90	67	53
CFSM	2.34	2.04	1.81	1.79	1.41	1.87	2.50	1.77	1.38	1.12	.86	.58
IN.	2.69	2.27	2.08	2.07	1.52	2.16	2.79	2.05	1.54	1.30	.99	.65

CAL YR 1979 TOTAL 97681 MEAN 268 MAX 1440 MIN 123 CFSM 2.37 IN 32.16
WTR YR 1980 TOTAL 67132 MEAN 183 MAX 404 MIN 53 CFSM 1.62 IN 22.10

01411500 MAURICE RIVER AT NORMA, NJ--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1923, 1953, 1960-62, 1965 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: January to September 1980.
WATER TEMPERATURES: October 1966 to January 1968 (once daily), January to September 1980.
SUSPENDED-SEDIMENT DISCHARGE: February 1965 to January 1968.
INSTRUMENTATION: Water-quality monitor since January 1980.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 112 micromhos Aug. 28; minimum, 56 micromhos May 1.
WATER TEMPERATURES: Maximum, 28°C July 21, Aug. 5, 6; minimum, 1.0°C Feb. 1, 2.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIOCHEM UNINHIB 5 DAY (MG/L)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS (MG/L AS CACO3)
OCT 11...	1100	327	65	5.8	9.5	2.0	9.6	1.0	K14	590	14
NOV 29...	1030	240	63	6.4	9.5	2.0	10.2	.6	180	230	15
DEC 11...	1200	214	73	5.8	6.0	1.0	12.2	.6	19	66	14
JAN 22...	1200	212	73	6.6	--	.60	11.4	1.2	K9	92	17
FEB 28...	1100	163	74	6.4	3.5	.50	12.4	1.1	K6	K57	16
MAR 17...	1130	229	66	6.5	8.0	.70	11.5	1.8	K7	130	15
APR 24...	1100	200	72	6.4	17.5	1.0	9.4	1.2	K18	290	17
MAY 16...	1200	176	76	5.3	18.5	1.4	7.1	.1	--	700	17
JUN 19...	1200	155	75	5.2	19.5	1.5	8.3	2.1	38	1500	16
JUL 23...	1045	134	77	6.3	--	3.0	6.1	1.3	>600	4900	16
AUG 07...	1135	121	78	6.7	26.0	1.9	7.0	.9	96	920	20
SEP 11...	1035	62	84	6.7	18.5	.50	8.4	1.4	80	1200	17

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SEDI-MENT, SUS-PENDED (MG/L)
OCT 11...	2.9	1.6	6.8	1.9	5	9.0	7.4	.1	6.7	64	5
NOV 29...	3.1	1.7	4.5	1.8	6	7.7	7.5	.1	5.5	54	6
DEC 11...	2.9	1.7	4.4	1.6	6	7.7	7.2	.0	5.4	60	2
JAN 22...	3.4	2.1	5.5	1.4	5	10	8.5	.1	5.5	55	2
FEB 28...	3.4	1.9	5.3	1.7	5	8.9	7.8	.1	5.5	49	5
MAR 17...	3.0	1.7	4.9	1.6	3	8.5	7.4	.1	4.6	48	1
APR 24...	3.5	2.0	5.1	1.9	5	9.8	7.9	.1	2.0	58	10
MAY 16...	3.4	2.1	6.9	1.6	6	12	8.3	.1	3.9	68	5
JUN 19...	3.1	1.9	5.9	2.1	7	11	7.9	.1	5.0	67	3
JUL 23...	3.3	1.9	4.9	1.8	1	7.8	6.6	.1	5.3	51	6
AUG 07...	4.3	2.3	6.0	1.8	7	7.3	7.9	.0	5.7	62	3
SEP 11...	3.1	2.3	6.4	1.9	12	7.8	8.5	.1	7.1	53	1

01411500 MAURICE RIVER AT NORMA, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	SEDIMENT DISCHARGE, SUSPENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, NH4 + ORG. SUSP. TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N)
OCT 11...	4.4	73	1.0	.91	.040	.040	.50	.34	.54	.16	.38
NOV 29...	3.9	100	1.2	1.1	.050	.030	.50	.47	.55	.05	.50
DEC 11...	1.2	100	1.7	1.6	.090	.070	.40	.27	.49	.15	.34
JAN 22...	1.1	36	1.6	1.5	.090	.060	.33	--	.42	--	--
FEB 28...	2.2	5	2.4	2.4	.050	.040	.77	.30	.82	.48	.34
MAR 17...	.62	25	1.5	1.4	.050	.050	.27	.23	.32	.04	.28
APR 24...	5.4	36	1.4	1.4	.060	.030	.26	.26	.32	.03	.29
MAY 16...	2.4	56	1.4	1.4	.070	.070	.35	.34	.42	.01	.41
JUN 19...	1.3	36	1.5	1.5	--	.080	--	.49	--	--	.57
JUL 23...	2.2	53	1.2	1.2	.070	.050	.46	.07	.53	.41	.12
AUG 07...	.98	76	1.2	1.2	.090	.040	.19	.01	.28	.23	.05
SEP 11...	.17	50	1.9	1.9	.130	.070	.16	.12	.29	.10	.19

DATE	NITROGEN, DISSOLVED (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, DISSOLVED (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DISSOLVED (MG/L AS C)	CARBON, ORGANIC SUSPENDED (MG/L AS C)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC SUSPENDED TOTAL (UG/L AS AS)	ARSENIC DISSOLVED (UG/L AS AS)
OCT 11...	1.3	1.5	.040	.030	10	--	--	--	--	--
NOV 29...	1.6	1.7	.030	.020	--	6.3	1.3	230	30	200
DEC 11...	1.9	2.2	.060	.030	5.2	--	--	230	--	--
JAN 22...	--	2.0	.020	.010	6.2	--	--	170	--	--
FEB 28...	2.7	3.2	.050	.040	--	4.1	.2	160	0	160
MAR 17...	1.7	1.8	.030	.020	5.3	--	--	150	--	--
APR 24...	1.7	1.7	.030	.030	7.4	--	--	--	--	--
MAY 16...	1.8	1.8	.040	.030	--	7.4	--	300	30	270
JUN 19...	2.1	--	.040	.020	4.2	--	--	360	--	--
JUL 23...	1.3	1.7	.100	.030	12	--	--	--	--	--
AUG 07...	1.2	1.5	.080	.020	--	--	.7	270	0	270
SEP 11...	2.1	2.2	.020	.010	3.4	--	--	460	--	--

DATE	TIME	BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	BARIUM, SUSPENDED RECOVERABLE (UG/L AS BA)	BARIUM, DISSOLVED (UG/L AS BA)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM SUSPENDED RECOVERABLE (UG/L AS CD)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, SUSPENDED RECOV. (UG/L AS CR)	CHROMIUM, DISSOLVED (UG/L AS CR)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)	COBALT, SUSPENDED RECOVERABLE (UG/L AS CO)
OCT 11...	1100	--	--	--	--	--	--	--	--	--	--	--
NOV 29...	1030	50	0	50	2	0	2	10	0	10	0	0
DEC 11...	1200	--	--	--	--	--	--	--	--	--	--	--
FEB 28...	1100	100	30	70	7	0	7	10	0	<10	2	0
MAR 17...	1130	--	--	--	--	--	--	--	--	--	--	--
MAY 16...	1200	100	30	70	2	0	2	10	0	10	0	0
JUN 19...	1200	--	--	--	--	--	--	--	--	--	--	--
AUG 07...	1135	<50	--	<50	0	0	0	20	10	10	0	0
SEP 11...	1035	--	--	--	--	--	--	--	--	--	--	--

MAURICE RIVER BASIN

01411500 MAURICE RIVER AT NORMA, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, SUS-PENDED RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, SUS-PENDED RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, SUS-PENDED RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, SUS-PENDED RECOV. (UG/L AS MN)
OCT 11...	--	--	--	--	--	--	--	--	--	--	--	--
NOV 29...	0	3	2	1	770	520	250	4	4	0	20	0
DEC 11...	--	--	--	--	--	--	--	--	--	--	--	--
FEB 28...	2	3	1	2	350	200	150	5	4	1	30	0
MAR 17...	--	--	--	--	--	--	--	--	--	--	--	--
MAY 16...	0	3	1	2	820	350	470	2	1	1	30	0
JUN 19...	--	--	--	--	--	--	--	--	--	--	--	--
AUG 07...	0	0	0	0	830	50	780	6	6	0	40	10
SEP 11...	--	--	--	--	--	--	--	--	--	--	--	--

DATE	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MERCURY SUS-PENDED RECOV-ERABLE (UG/L AS HG)	MERCURY DIS-SOLVED (UG/L AS HG)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	NICKEL, SUS-PENDED RECOV-ERABLE (UG/L AS NI)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, SUS-PENDED TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG)
OCT 11...	--	--	--	--	--	--	--	--	--	--	--
NOV 29...	20	.1	.0	.1	3	1	2	0	0	0	0
DEC 11...	--	--	--	--	--	--	--	--	--	--	0
FEB 28...	30	.2	.0	.2	3	0	3	0	0	0	0
MAR 17...	--	--	--	--	--	--	--	--	--	--	0
MAY 16...	30	.1	--	<.1	2	2	0	0	0	0	0
JUN 19...	--	--	--	--	--	--	--	--	--	--	2
AUG 07...	30	.2	.1	.1	4	2	2	0	0	0	0
SEP 11...	--	--	--	--	--	--	--	--	--	--	0

DATE	SILVER, SUS-PENDED RECOV-ERABLE (UG/L AS AG)	SILVER, DIS-SOLVED (UG/L AS AG)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, SUS-PENDED RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)	PCB, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	ALDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	CHLOR-DANE, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	DI-AZINON, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	DI-ELDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	ENDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)
OCT 11...	--	--	--	--	--	0	.0	0	.0	.0	.0
NOV 29...	0	0	10	0	10	--	--	--	--	--	--
DEC 11...	--	--	--	--	--	--	--	--	--	--	--
FEB 28...	0	0	30	0	30	--	--	--	--	--	--
MAR 17...	--	--	--	--	--	--	--	--	--	--	--
MAY 16...	0	0	50	50	0	--	--	--	--	--	--
JUN 19...	--	--	--	--	--	--	--	--	--	--	--
AUG 07...	0	0	20	10	10	--	--	--	--	--	--
SEP 11...	--	--	--	--	--	--	--	--	--	--	--

01411500 MAURICE RIVER AT NORMA, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	ETHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)	LINDANE TOTAL IN BOTTOM MATERIAL (UG/KG)	MALATHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	METHOXYCHLOR, TOT. IN BOTTOM MATL. (UG/KG)	METHYL PARATHION, TOT. IN BOTTOM MATL. (UG/KG)	METHYL TRITHION, TOT. IN BOTTOM MATL. (UG/KG)	PARATHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	TOXAPHENE, TOTAL IN BOTTOM MATERIAL (UG/KG)	TRITHION, TOTAL IN BOTTOM MATERIAL (UG/KG)
OCT 11...	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
NOV 29...	--	--	--	--	--	--	--	--	--	--	--
DEC 11...	--	--	--	--	--	--	--	--	--	--	--
FEB 28...	--	--	--	--	--	--	--	--	--	--	--
MAR 17...	--	--	--	--	--	--	--	--	--	--	--
MAY 16...	--	--	--	--	--	--	--	--	--	--	--
JUN 19...	--	--	--	--	--	--	--	--	--	--	--
AUG 07...	--	--	--	--	--	--	--	--	--	--	--
SEP 11...	--	--	--	--	--	--	--	--	--	--	--

DATE	LENGTH OF EXPOSURE (DAYS)	PERIPHYTON BIOMASS TOTAL DRY WEIGHT G/SQ M	PERIPHYTON BIOMASS ASH WEIGHT G/SQ M	CHLOR-A PERIPHYTON CHROMOGRAPHIC FLUOROM (MG/M2)	CHLOR-B PERIPHYTON CHROMOGRAPHIC FLUOROM (MG/M2)	BIOMASS CHLOROPHYLL RATIO PERIPHYTON (UNITS)
DEC 11...	11	.000	.000	.000	.000	--
JAN 22...	41	.310	.160	.220	.000	682
FEB 14...	22	.000	.000	.000	.000	--
MAY 16...	21	.000	.000	.050	.000	.00
AUG 26...	18	2.05	1.50	.170	.000	3235

01411500 MAURICE RIVER AT NORMA, NJ--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1										---	---	---
2										---	---	---
3										---	---	---
4										---	---	---
5										---	---	---
6										---	---	---
7										---	---	---
8										---	---	---
9										---	---	---
10										---	---	---
11										---	---	---
12										---	---	---
13										---	---	---
14										---	---	---
15										---	---	---
16										---	---	---
17										---	---	---
18										7.5	7.0	7.0
19										8.0	7.0	7.5
20										7.0	5.5	6.5
21										6.0	4.5	5.5
22										5.5	4.5	5.5
23										6.0	4.5	5.5
24										4.0	2.5	3.0
25										3.5	2.5	3.0
26										4.5	3.0	3.5
27										4.5	3.0	4.0
28										5.5	4.5	5.0
29										5.5	3.5	4.5
30										3.5	2.5	3.0
31										3.0	1.5	2.5
MONTH										8.0	1.5	4.5

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	3.0	1.0	2.0	2.5	1.0	2.0	11.5	8.0	9.5	13.5	12.0	13.0
2	2.5	1.0	2.0	3.0	1.5	2.5	12.5	8.5	10.5	16.5	13.0	14.5
3	3.0	1.5	2.5	4.5	1.5	3.0	14.0	10.0	12.0	18.5	14.5	16.5
4	3.5	2.5	3.0	5.5	2.5	4.0	14.0	12.0	13.0	20.0	17.0	18.5
5	4.5	3.0	3.5	6.5	5.0	5.5	14.0	11.5	12.5	21.0	16.5	19.0
6	4.5	3.0	4.0	7.0	5.0	6.0	15.0	11.0	13.0	22.0	18.5	20.5
7	5.0	4.0	4.5	8.0	5.5	7.0	15.5	12.5	14.0	22.5	19.5	21.0
8	5.5	3.5	4.5	10.0	8.0	9.0	16.5	13.5	15.0	20.0	17.0	18.5
9	5.0	4.0	4.5	11.0	9.5	10.0	15.0	14.5	15.0	17.5	15.0	16.5
10	5.5	4.0	5.0	11.0	8.5	10.0	17.5	14.5	16.0	18.0	14.5	16.5
11	5.5	3.5	4.5	11.0	8.5	10.0	18.0	14.5	16.0	17.5	16.0	17.0
12	6.0	4.5	5.0	8.5	7.5	8.0	17.5	14.5	16.0	19.5	16.5	18.0
13	5.5	3.5	4.5	7.0	5.5	6.5	18.5	16.0	17.0	21.5	18.5	20.0
14	6.5	4.0	5.5	5.5	5.0	5.5	17.0	15.0	15.5	22.0	20.0	21.0
15	6.0	5.0	5.5	7.0	4.0	5.5	17.0	15.0	15.5	20.5	19.0	20.0
16	6.0	4.5	5.5	8.0	5.0	6.5	14.5	11.0	13.0	20.0	18.0	19.0
17	4.5	3.0	3.5	9.5	7.0	8.5	13.0	9.5	11.0	19.5	17.5	18.5
18	4.5	2.5	3.5	11.5	9.5	10.5	15.0	10.0	12.5	18.0	17.5	18.0
19	6.0	3.5	4.5	11.0	8.5	9.5	16.5	12.0	14.5	20.0	17.5	19.0
20	7.5	4.5	6.0	11.0	9.0	10.0	18.0	13.5	16.0	20.0	19.0	19.5
21	8.0	5.5	7.0	12.0	10.5	11.0	19.0	15.5	17.0	19.5	18.0	18.5
22	7.5	7.0	7.0	10.5	8.0	9.0	18.0	15.0	16.5	20.5	17.0	19.0
23	8.5	7.0	7.5	10.5	7.0	8.5	18.0	14.0	16.0	22.0	19.0	20.5
24	9.0	8.0	8.5	9.5	8.0	8.5	18.5	15.0	17.0	22.5	20.5	21.5
25	8.5	7.5	8.0	9.0	8.5	8.5	19.5	16.5	18.0	23.5	21.5	22.5
26	7.5	5.0	6.5	9.0	7.5	8.5	18.5	15.0	16.5	23.0	21.0	22.0
27	5.5	4.5	5.0	10.5	7.5	9.0	15.0	14.0	14.5	20.5	18.5	20.0
28	4.5	3.5	4.0	10.5	8.0	9.5	14.0	13.5	14.0	20.5	18.0	19.5
29	4.0	2.5	3.0	10.5	9.5	10.0	13.5	13.0	13.5	21.5	19.5	20.5
30	---	---	---	12.0	10.5	11.0	13.5	12.5	13.0	21.5	19.5	20.5
31	---	---	---	11.0	8.5	10.0	---	---	---	21.0	19.0	20.0
MONTH	9.0	1.0	5.0	12.0	1.0	8.0	19.5	8.0	14.5	23.5	12.0	19.0

01411500 MAURICE RIVER AT NORMA, NJ--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	23.5	20.0	22.0	24.5	22.0	23.5	26.0	23.5	25.0	25.0	23.0	24.5
2	24.5	22.5	23.5	25.0	22.5	24.0	26.5	24.5	26.0	24.5	22.0	23.5
3	25.5	23.0	24.0	24.5	23.5	24.0	28.0	25.0	26.5	24.0	22.5	23.5
4	24.0	22.5	23.5	25.5	23.0	24.0	27.0	24.5	26.0	23.0	20.5	22.0
5	23.0	20.5	22.0	25.5	24.0	25.0	28.0	25.5	26.5	23.0	21.5	22.0
6	21.5	19.5	20.5	25.5	23.5	24.5	28.0	25.5	27.0	23.5	21.0	22.5
7	23.0	20.0	21.5	24.5	22.0	23.0	27.5	25.5	26.5	23.5	21.5	22.5
8	23.0	21.0	22.0	23.5	21.5	22.5	26.5	24.0	25.5	22.0	19.5	21.0
9	21.0	19.0	20.0	24.0	21.0	22.5	26.5	25.0	26.0	22.0	19.5	21.0
10	19.5	19.0	19.0	24.0	22.5	23.5	26.5	24.5	25.5	22.5	20.5	21.5
11	20.0	17.5	19.0	25.5	23.0	24.5	25.5	24.0	25.0	21.0	18.5	20.0
12	20.5	18.0	19.5	25.5	23.5	24.5	25.5	23.5	24.5	21.0	18.0	19.5
13	21.5	19.0	20.0	25.0	22.5	24.0	25.5	23.5	24.5	21.5	18.5	20.0
14	22.5	19.0	21.0	25.0	22.0	24.0	25.5	23.0	24.0	22.0	20.0	21.0
15	23.5	21.5	22.5	25.0	22.5	24.0	25.0	24.0	24.5	22.0	20.5	21.5
16	21.5	20.5	21.0	26.5	23.5	25.0	24.0	22.5	23.0	20.5	18.0	19.0
17	22.0	19.0	20.5	26.0	24.0	25.0	23.0	20.0	22.0	21.0	18.0	19.5
18	21.5	20.0	21.0	26.0	24.5	25.5	22.5	21.0	21.5	21.5	20.0	21.0
19	21.5	19.0	20.5	26.0	24.0	25.5	21.0	20.0	20.5	20.5	18.5	19.5
20	21.5	19.0	20.0	27.0	24.0	25.5	23.0	20.5	21.5	20.5	18.0	19.5
21	22.5	19.5	21.0	28.0	25.5	26.5	22.0	21.0	21.5	22.0	19.0	20.5
22	23.5	20.0	21.5	27.0	25.0	26.0	21.0	20.5	20.5	23.0	20.5	22.0
23	23.5	20.5	22.0	25.0	24.0	24.5	22.0	19.0	20.5	23.5	22.0	22.5
24	24.0	21.0	22.5	25.0	22.5	24.0	23.0	20.5	22.0	22.0	20.0	21.0
25	24.5	22.5	23.5	25.0	22.0	24.0	23.5	21.0	22.5	20.0	19.0	19.5
26	23.0	21.5	22.0	25.5	23.5	24.5	23.5	21.0	22.5	21.0	19.0	20.0
27	25.0	21.5	23.0	25.5	23.0	24.5	24.0	22.0	23.0	18.5	16.5	17.5
28	25.0	23.0	24.0	25.5	23.5	24.5	24.0	22.0	23.0	17.5	14.5	16.0
29	24.5	23.0	23.5	25.5	24.0	25.0	24.0	23.0	23.5	18.0	15.5	17.0
30	25.0	22.5	23.5	25.5	24.0	25.0	24.5	23.0	23.5	18.5	17.0	18.0
31	---	---	---	25.5	23.5	24.5	24.5	22.5	24.0	---	---	---
MONTH	25.5	17.5	21.5	28.0	21.0	24.5	28.0	19.0	24.0	25.0	14.5	20.5

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1										---	---	---
2										---	---	---
3										---	---	---
4										---	---	---
5										---	---	---
6										---	---	---
7										---	---	---
8										---	---	---
9										---	---	---
10										---	---	---
11										---	---	---
12										---	---	---
13										---	---	---
14										---	---	---
15										---	---	---
16										---	---	---
17										---	---	---
18										74	72	73
19										73	71	72
20										74	72	73
21										73	72	72
22										73	70	72
23										71	70	71
24										72	70	71
25										74	72	73
26										73	71	72
27										74	72	74
28										74	72	73
29										75	73	74
30										75	73	74
31										75	72	74
MONTH										75	70	73

01411500 MAURICE RIVER AT NORMA, NJ--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	84	73	77	75	72	74	68	65	66	60	56	57
2	77	73	76	76	73	75	66	65	65	62	57	60
3	79	77	78	76	75	76	65	64	65	65	62	63
4	80	79	80	77	74	75	65	60	63	66	65	65
5	82	80	81	80	75	77	66	63	64	68	64	66
6	81	80	80	78	75	76	72	65	67	70	67	68
7	84	80	82	76	73	75	68	65	66	71	68	69
8	85	83	84	76	72	74	72	67	70	71	66	68
9	86	85	86	74	71	73	70	64	67	69	66	68
10	86	82	84	73	71	72	66	64	65	71	66	68
11	83	81	82	73	70	71	64	63	63	70	69	69
12	83	77	80	72	71	71	64	62	63	72	69	70
13	80	77	78	72	67	70	67	64	64	74	71	72
14	81	80	80	66	61	64	71	63	68	74	70	73
15	80	78	80	67	65	66	72	67	69	72	68	70
16	80	78	79	66	65	66	72	68	70	79	66	---
17	78	75	76	68	66	67	73	71	72	79	70	---
18	76	74	75	70	69	69	72	68	71	80	76	78
19	76	75	75	71	70	70	71	70	70	82	76	80
20	77	74	76	71	70	71	78	68	73	81	78	79
21	76	73	75	71	64	68	77	72	73	80	76	78
22	75	73	74	70	66	69	72	70	71	84	77	80
23	73	72	73	70	68	69	72	68	70	84	78	82
24	74	72	73	68	66	68	73	67	71	86	74	79
25	73	72	73	66	62	64	75	72	73	85	77	80
26	72	71	71	67	64	65	77	70	74	78	72	76
27	73	71	72	68	66	67	76	72	74	---	---	---
28	73	70	72	68	67	67	75	66	69	---	---	---
29	74	71	72	68	65	67	66	63	64	80	77	---
30	---	---	---	69	65	68	66	60	64	79	73	---
31	---	---	---	70	68	69	---	---	---	87	81	---
MONTH	86	70	77	80	61	70	78	60	68	87	56	72

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	84	78	82	69	67	68	87	82	86	93	84	89
2	82	79	80	70	67	68	84	80	83	97	91	93
3	83	78	79	72	66	70	83	77	80	94	89	91
4	80	77	79	74	66	70	85	79	83	94	89	91
5	79	73	76	75	71	73	82	79	81	91	88	90
6	82	76	79	77	74	75	83	79	82	91	90	90
7	86	69	83	79	75	77	86	80	83	91	88	89
8	81	68	74	85	77	82	88	83	86	88	85	87
9	75	70	73	85	80	83	89	84	87	86	84	85
10	73	67	69	82	78	80	88	85	86	89	85	86
11	75	71	73	78	74	77	88	84	87	86	84	85
12	80	76	79	80	74	78	91	84	86	86	84	85
13	77	73	75	84	76	81	90	83	85	87	84	85
14	85	71	76	83	77	81	86	81	85	89	86	87
15	80	73	77	85	81	83	85	82	83	94	89	92
16	71	65	68	85	83	84	88	85	86	92	87	89
17	73	69	71	87	84	85	86	82	84	88	85	87
18	75	69	72	87	84	85	85	82	83	88	82	84
19	79	73	76	86	85	85	93	85	90	88	83	86
20	79	75	76	89	86	87	93	86	89	88	87	87
21	79	74	76	88	84	87	88	87	87	86	83	84
22	80	77	78	89	83	86	88	85	86	85	83	84
23	87	79	83	85	74	80	90	85	87	83	81	82
24	88	85	87	93	84	89	90	81	85	81	77	80
25	91	85	88	92	86	88	94	86	90	80	77	79
26	91	83	88	93	89	90	101	94	97	87	76	82
27	86	82	83	93	86	90	108	95	103	87	83	84
28	86	76	84	86	84	85	112	91	104	83	82	83
29	86	75	82	87	84	86	101	92	97	86	83	84
30	73	70	71	89	84	86	95	87	93	83	81	82
31	---	---	---	88	86	87	95	83	89	---	---	---
MONTH	91	65	78	93	66	81	112	77	88	97	76	86

01411500 MAURICE RIVER AT NORMA, NJ--Continued

PHYTOPLANKTON ANALYSES, OCTOBER 1979 TO SEPTEMBER 1980

	OCT 11,79	NOV 29,79	MAR 17,80	MAY 16,80
DATE	OCT 11,79	NOV 29,79	MAR 17,80	MAY 16,80
TIME	1100	1030	1130	1200
TOTAL CELLS/ML	590	720	230	140
DIVERSITY: DIVISION	1.7	1.8	1.8	1.1
.CLASS	1.7	1.9	2.0	1.1
..ORDER	1.9	0.0	2.3	1.1
...FAMILY	2.6	0.0	2.7	1.1
....GENUS	2.7	0.0	2.7	1.1

ORGANISM	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT
CHLOROPHYTA (GREEN ALGAE)								
.CHLOROPHYCEAE								
..CHLOROCOCCALES								
...OOCYSTACEAE								
....ANKISTRODESMUS	5	1	10	1	--	-	--	-
....CHLORELLA	80	14	--	-	--	-	--	-
....DICTYOSPHAERIUM	--	-	--	-	--	-	--	-
....KIRCHNERIELLA	--	-	--	-	--	-	--	-
....SELENASTRUM	--	-	--	-	--	-	--	-
...SCENEDESMACEAE								
....CRUCIGENIA	--	-	--	-	--	-	--	-
....SCENEDESMUS	50	9	50	7	26	11	--	-
..TETRASPORALES								
...PALMELLACEAE								
....SPHAEROCYSTIS	--	-	--	-	--	-	--	-
..VOLVOCALES								
...CHLAMYDOMONADACEAE								
....CHLAMYDOMONAS	15	3	70	10	39#	17	26#	18
CHRYSOPHYTA								
.BACILLARIOPHYCEAE								
..CENTRALES								
...COSCINODISCACEAE								
....CYCLOTELLA	5	1	50	7	--	-	--	-
..PENNALES								
...ACHNANTHACEAE								
....ACHNANTHES	--	-	25	3	--	-	--	-
...CYMBELLACEAE								
....CYMBELLA	5	1	--	-	--	-	--	-
...DIATOMACEAE								
....DIATOMA	--	-	--	-	--	-	--	-
...EUNOTIACEAE								
....EUNOTIA	--	-	45	6	--	-	--	-
...FRAGILARIACEAE								
....ASTERIONELLA	--	-	--	-	--	-	--	-
....FRAGILARIA	60	10	50	7	--	-	--	-
....SYNEDRA	5	1	5	1	--	-	--	-
...GOMPHONEMATACEAE								
....GOMPHONEMA	5	1	5	1	26	11	--	-
...NAVICULACEAE								
....NAVICULA	30	5	25	3	26	11	--	-
...NITZSCHIACEAE								
....NITZSCHIA	15	3	30	4	13	6	--	-

MAURICE RIVER BASIN

01411500 MAURICE RIVER AT NORMA, NJ--Continued

PHYTOPLANKTON ANALYSES, OCTOBER 1979 TO SEPTEMBER 1980

CHRYSOPHYTA								
...TABELLARIACEAE								
....TABELLARIA	15	3	5	1	--	-	--	-
.CHRYSOPHYCEAE								
..CHRYSOMONADALES								
...MALLOMONADACEAE								
....MALLOMONAS	--	-	--	-	--	-	13	9
...OCHROMONADACEAE								
....OCHROMONAS	--	-	15	2	13	6	--	-
CRYPTOPHYTA (CRYPTOMONADS)								
.CRYPTOPHYCEAE	--	-	5	1	--	-	--	-
..CRYPTOMONADALES								
...CRYPTOCHRYSIDACEAE								
....CHROOMONAS	--	-	--	-	--	-	--	-
...CRYPTOMONADACEAE								
....CRYPTOMONAS	30	5	--	-	--	-	--	-
CYANOPHYTA (BLUE-GREEN ALGAE)								
.CYANOPHYCEAE								
..CHROOCOCCALES								
...CHROOCOCCACEAE								
....ANACYSTIS	--	-	250#	35	77#	33	--	-
..HORMOGONALES								
...NOSTOCACEAE								
....ANABAENA	--	-	--	-	--	-	--	-
...OSCILLATORIACEAE								
....OSCILLATORIA	--	-	--	-	--	-	--	-
....PHORMIDIUM	--	-	--	-	--	-	100#	73
....SCHIZOTHRIX	270#	45	45	6	--	-	--	-
EUGLENOPHYTA (EUGLENOIDS)								
.EUGLENOPHYCEAE								
..EUGLENALES								
...EUGLENACEAE								
....EUGLENA	--	-	10	1	13	6	--	-
....TRACHELOMONAS	--	-	25	3	--	-	--	-

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%
* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

DATE TIME	JUN 28,80 0001	JUL 23,80 1045	AUG 7,80 1135	SEP 11,80 1035
TOTAL CELLS/ML	39	450	1400	880
DIVERSITY: DIVISION	0.9	1.6	1.3	1.3
.CLASS	0.9	1.6	1.3	1.3
..ORDER	1.6	2.3	1.5	1.6
...FAMILY	1.6	2.7	2.3	1.7
....GENUS	1.6	2.7	2.4	2.3

ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)								
.CHLOROPHYCEAE								
..CHLOROCOCCALES								
...OOCYSTACEAE								
....ANKISTRODESMUS	--	-	--	-	13	1	--	-
....CHLORELLA	--	-	--	-	--	-	--	-
....DICTYOSPHAERIUM	--	-	--	-	39	3	--	-
....KIRCHNERIELLA	--	-	52	11	--	-	--	-
....SELENASTRUM	13#	33	--	-	26	2	--	-
...SCENEDESMACEAE								
....CRUCIGENIA	--	-	--	-	--	-	26	3
....SCENEDESMUS	--	-	100#	23	230#	17	--	-
..TETRASPORALES								
...PALMELLACEAE								
....SPHAEROCYSTIS	--	-	--	-	--	-	100	12
..VOLVOCALES								
...CHLAMYDOMONADACEAE								
....CHLAMYDOMONAS	--	-	52	11	--	-	--	-
CHRYSOPHYTA								
.BACILLARIOPHYCEAE								
..CENTRALES								
...COSCINODISCACEAE								
....CYCLOTELLA	13#	33	26	6	13	1	--	-
..PENNALES								
...ACHNANTHACEAE								
....ACHNANTHES	--	-	--	-	--	-	--	-
...CYMBELLACEAE								
....CYMBELLA	--	-	--	-	--	-	--	-
...DIATOMACEAE								
....DIATOMA	--	-	--	-	13	1	--	-
...EUNOTIACEAE								

01411500 MAURICE RIVER AT NORMA, NJ--Continued

PHYTOPLANKTON ANALYSES, OCTOBER 1979 TO SEPTEMBER 1980

CHRYSOPHYTA								
....EUNOTIA	--	-	--	-	--	-	--	-
...FRAGILARIACEAE								
....ASTERIONELLA	--	-	--	-	120	8	--	-
....FRAGILARIA	13#	33	--	-	--	-	130	15
....SYNEDRA	--	-	--	-	--	-	--	-
...GOMPHONEMATACEAE								
....GOMPHONEMA	--	-	--	-	--	-	--	-
...NAVICULACEAE								
....NAVICULA	--	-	13	3	--	-	--	-
...NITZSCHIACEAE								
....NITZSCHIA	--	-	13	3	26	2	13	1
...TABELLARIACEAE								
....TABELLARIA	--	-	--	-	--	-	--	-
.CHRYSOPHYCEAE								
..CHRYSOMONADALES								
...MALLOMONADACEAE								
....MALLOMONAS	--	-	--	-	--	-	--	-
...OCHROMONADACEAE								
....OCHROMONAS	--	-	--	-	--	-	--	-
CRYPTOPHYTA (CRYPTOMONADS)								
.CRYPTOPHYCEAE	--	-	--	-	--	-	--	-
..CRYPTOMONADALES								
...CRYPTOCHRYSIDACEAE								
....CHROOMONAS	--	-	13	3	--	-	--	-
...CRYPTOMONADACEAE								
....CRYPTOMONAS	--	-	13	3	--	-	13	1
CYANOPHYTA (BLUE-GREEN ALGAE)								
.CYANOPHYCEAE								
..CHROOCOCCALES								
...CHROOCOCCACEAE								
....ANACYSTIS	--	-	13	3	39	3	26	3
..HORMOGONALES								
...NOSTOCACEAE								
....ANABAENA	--	-	--	-	270#	20	--	-
...OSCILLATORIACEAE								
....OSCILLATORIA	--	-	150#	34	590#	43	350#	40
....PHORMIDIUM	--	-	--	-	--	-	220#	25
....SCHIZOTHRIX	--	-	--	-	--	-	--	-
EUGLENOPHYTA (EUGLENOIDS)								
.EUGLENOPHYCEAE								
..EUGLENALES								
...EUGLENACEAE								
....EUGLENA	--	-	--	-	--	-	--	-
....TRACHELOMONAS	--	-	--	-	--	-	--	-

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%
* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

01412000 MENANTICO CREEK NEAR MILLVILLE, NJ

LOCATION.--Lat 39°25'12", long 74°58'00", Cumberland County, Hydrologic Unit 02040206, on right bank at upstream side of Mays Landing Road (Route 552), 0.9 mi (1.4 km) downstream of Menantico Lake, 4.0 mi (6.4 km) northeast of Millville, and 7.0 mi (11.3 km) upstream from mouth.

DRAINAGE AREA.--22.3 mi² (57.8 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1931 to September 1957, October 1977 to current year. Published as "Manantico Creek" prior to October 1978.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 36.63 ft (11.165 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Water-discharge records good.

AVERAGE DISCHARGE.--29 years (water years 1932-57, 1978-80), 38.3 ft³/s (1.085 m³/s), 23.32 in/yr (592 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,050 ft³/s (29.7 m³/s) Aug. 20, 1939, gage height, 6.21 ft (1.893 m), from rating curve extended above 300 ft³/s (8.5 m³/s); minimum, 1.4 ft³/s (0.040 m³/s) Aug. 16-18, 1936.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 125 ft³/s (3.54 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Mar. 26	0200	125	3.54	2.30	0.701
June 30	1545	*164	4.64	2.73	0.832

Minimum discharge, 8.7 ft³/s (0.25 m³/s) Mar. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	41	34	36	34	30	29	92	80	31	80	24	18
2	42	34	36	33	34	33	87	80	30	39	25	18
3	43	44	36	32	31	29	70	63	30	37	24	18
4	44	60	34	32	31	29	73	52	29	45	23	18
5	40	50	34	31	31	31	93	48	28	44	23	18
6	41	42	34	31	30	33	84	44	27	36	22	19
7	38	39	43	31	31	32	66	42	28	32	21	19
8	35	37	43	31	31	32	59	42	59	32	20	16
9	35	37	38	31	31	33	68	44	102	30	19	14
10	52	37	36	32	31	32	116	43	66	32	19	14
11	88	42	35	36	31	37	99	41	48	33	20	14
12	71	67	34	44	31	36	72	40	42	31	84	14
13	68	67	36	52	30	38	60	40	37	28	79	15
14	84	54	42	54	30	69	55	38	34	27	42	16
15	66	47	40	60	30	73	62	37	32	26	33	16
16	52	44	37	52	34	52	58	35	54	25	29	16
17	46	42	35	48	39	43	53	34	62	23	27	16
18	43	40	33	44	36	47	50	39	48	22	26	21
19	42	39	33	54	33	48	48	47	40	22	26	22
20	40	39	34	52	32	46	47	44	36	21	25	22
21	39	38	34	50	32	58	45	44	33	21	24	22
22	39	35	34	46	34	99	44	45	32	22	24	20
23	37	34	36	52	38	81	43	41	30	39	23	20
24	37	34	36	49	39	57	42	38	25	45	23	18
25	37	35	38	46	37	97	42	35	20	34	22	20
26	37	39	40	44	35	114	42	33	15	30	22	22
27	36	48	37	42	32	78	46	32	15	27	21	22
28	36	44	37	39	31	60	52	31	16	26	20	20
29	36	39	36	36	31	65	68	30	24	25	20	19
30	35	37	35	33	---	82	67	30	99	25	19	18
31	34	---	34	35	---	77	---	31	---	24	19	---
TOTAL	1414	1278	1126	1286	946	1670	1903	1323	1172	983	848	545
MEAN	45.6	42.6	36.3	41.5	32.6	53.9	63.4	42.7	39.1	31.7	27.4	18.2
MAX	88	67	43	60	39	114	116	80	102	80	84	22
MIN	34	34	33	31	30	29	42	30	15	21	19	14
CFSM	2.05	1.91	1.63	1.86	1.46	2.42	2.84	1.92	1.75	1.42	1.23	.82
IN.	2.36	2.13	1.88	2.15	1.58	2.79	3.17	2.21	1.95	1.64	1.41	.91

CAL YR 1979 TOTAL 20933 MEAN 57.4 MAX 461 MIN 26 CFSM 2.57 IN 34.92
WTR YR 1980 TOTAL 14494 MEAN 39.6 MAX 116 MIN 14 CFSM 1.78 IN 24.18

01412350 DELAWARE BAY AT SHIP JOHN SHOAL LIGHTHOUSE, NJ

LOCATION.--Lat 39°18'19", long 75°22'37", Cumberland County, Hydrologic Unit 02040204, water-quality recorder on light ship in bay opposite Bombay Hook Island, DE., and 3.0 mi (4.8 km) southwest of mouth of Cohansey River, in NJ.

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1969 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: April 1969 to current year.
WATER TEMPERATURES: February 1970 to current year.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 52,800 micromhos Feb. 10, 1970; minimum, 1,500 micromhos Mar. 4, 1971.
WATER TEMPERATURES: Maximum, 33.0°C Aug. 2, 1979; minimum, freezing point on many days during winter periods.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	23.5	21.5	22.0	14.5	14.0	14.0	---	---	---	---	---	---
2	22.5	21.5	21.5	14.5	14.0	14.5	---	---	---	---	---	---
3	21.5	21.0	21.5	14.5	14.0	14.5	---	---	---	---	---	---
4	21.5	21.0	21.5	---	---	---	10.0	9.0	9.0	---	---	---
5	21.5	21.0	21.0	---	---	---	9.0	8.5	9.0	---	---	---
6	---	---	---	---	---	---	9.0	8.5	8.5	---	---	---
7	---	---	---	---	---	---	9.0	8.5	8.5	---	---	---
8	---	---	---	---	---	---	8.5	8.0	8.5	---	---	---
9	---	---	---	---	---	---	8.0	8.0	8.0	---	---	---
10	---	---	---	---	---	---	8.0	7.5	8.0	---	---	---
11	---	---	---	---	---	---	8.0	8.0	8.0	---	---	---
12	---	---	---	---	---	---	8.5	8.0	8.0	---	---	---
13	---	---	---	---	---	---	8.5	8.0	8.5	---	---	---
14	---	---	---	---	---	---	8.0	8.0	8.0	---	---	---
15	---	---	---	12.0	11.5	12.0	8.0	7.5	8.0	---	---	---
16	---	---	---	12.0	11.5	11.5	8.0	7.5	8.0	---	---	---
17	15.5	15.5	15.5	11.5	11.5	11.5	8.0	7.5	---	---	---	---
18	16.0	15.5	15.5	11.5	11.5	11.5	---	---	---	---	---	---
19	16.0	15.5	16.0	12.0	11.5	11.5	---	---	---	---	---	---
20	16.5	16.0	16.0	11.5	11.5	11.5	---	---	---	---	---	---
21	16.5	16.0	16.5	12.0	11.5	11.5	---	---	---	---	---	---
22	17.0	16.5	16.5	12.0	11.5	11.5	---	---	---	---	---	---
23	17.0	16.5	17.0	12.0	11.5	12.0	---	---	---	---	---	---
24	---	---	---	12.0	12.0	12.0	---	---	---	---	---	---
25	---	---	---	12.5	12.0	12.0	---	---	---	---	---	---
26	16.0	15.5	15.5	13.0	12.0	12.5	---	---	---	---	---	---
27	15.5	14.5	15.0	13.0	12.5	12.5	---	---	---	---	---	---
28	15.0	14.5	14.5	13.0	12.5	12.5	---	---	---	3.5	3.0	3.5
29	14.5	14.0	14.5	---	---	---	---	---	---	3.5	3.0	3.0
30	14.5	14.0	14.5	---	---	---	---	---	---	3.0	2.5	2.5
31	14.5	13.5	14.0	---	---	---	---	---	---	2.5	2.0	2.0
MONTH	23.5	13.5	17.0	14.5	11.5	12.5	10.0	7.5	8.5	3.5	2.0	3.0DAY

01412350 DELAWARE BAY AT SHIP JOHN SHOAL LIGHTHOUSE, NJ--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	2.0	1.0	1.5	1.5	1.0	1.5						
2	1.0	.0	.5	1.0	.5	1.0						
3	.5	.0	.0	.5	.0	.5						
4	.5	.0	.0	1.0	.0	.5						
5	.5	.0	.0	1.5	1.0	1.0						
6	.0	.0	.0	2.0	1.0	1.5						
7	.5	.0	.0	2.5	1.5	2.0						
8	.5	.0	.5	3.0	2.0	2.5						
9	.5	.0	.5	5.5	2.5	4.0						
10	1.0	.0	.5	4.5	3.5	4.0						
11	1.0	.5	1.0	4.0	4.0	---						
12	1.0	.5	1.0	---	---	---						
13	1.0	1.0	1.0	5.0	4.5	5.0						
14	1.5	1.0	1.0	5.0	4.0	4.5						
15	1.5	1.0	1.5	4.5	4.0	4.5						
16	1.5	1.0	1.5	4.5	4.0	4.5						
17	1.0	1.0	1.0	5.0	4.5	5.0						
18	1.0	.5	1.0	[illegible]	5.0	5.0						
19	1.5	1.0	1.0	6.0	5.0	5.5						
20	2.0	1.0	1.5	6.0	5.5	6.0						
21	2.0	1.5	2.0	6.5	5.5	6.0						
22	2.5	2.0	2.0	6.5	6.0	6.0						
23	2.5	2.0	2.5	7.0	5.5	6.0						
24	3.5	2.5	2.5	7.0	6.0	6.5						
25	3.0	2.5	3.0	7.5	6.5	6.5						
26	3.0	2.5	2.5	7.5	6.5	7.0						
27	3.0	2.5	2.5	9.0	6.5	7.5						
28	2.5	2.5	2.5	8.0	7.0	7.5						
29	2.5	1.5	2.0	8.0	7.5	7.5						
30	---	---	---	8.5	7.5	8.0						
31	---	---	---	8.0	8.0	8.0						
MONTH	3.5	.0	1.5	9.0	.0	4.5						

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	---	---	---	---	---	---	28.5	28.0	28.5	27.5	26.5	27.0
2	20.5	19.5	---	---	---	---	28.5	28.0	28.5	28.5	27.0	27.5
3	21.0	20.0	20.5	---	---	---	29.0	28.5	28.5	28.0	27.0	27.5
4	21.0	20.0	20.5	---	---	---	29.0	28.5	28.5	28.5	27.0	27.5
5	20.5	20.0	20.5	---	---	---	30.5	28.5	29.0	27.5	27.0	27.0
6	20.5	20.0	20.0	---	---	---	30.5	29.0	29.0	28.0	27.0	27.0
7	22.0	19.5	20.5	---	---	---	31.0	29.0	29.0	27.0	26.5	27.0
8	21.0	20.0	20.5	---	---	---	30.0	29.0	29.0	27.0	26.5	26.5
9	20.5	19.5	20.0	---	---	---	30.0	29.0	29.5	26.5	26.0	26.5
10	20.0	19.5	19.5	---	---	---	29.5	29.0	29.0	26.0	26.0	26.0
11	20.0	19.5	19.5	---	---	---	29.5	29.0	29.0	26.0	25.5	25.5
12	20.0	19.5	19.5	---	---	---	29.0	29.0	29.0	26.0	25.0	25.5
13	20.0	19.0	19.5	---	---	---	29.0	28.5	28.5	25.5	25.0	25.0
14	20.5	19.0	20.0	---	---	---	28.5	28.5	28.5	25.5	25.0	25.5
15	21.0	19.5	20.0	---	---	---	28.5	28.0	28.5	25.5	25.0	25.0
16	20.5	20.0	20.5	---	---	---	28.0	27.0	27.5	25.0	24.0	24.5
17	20.5	20.0	20.0	---	---	---	27.0	26.0	26.5	24.5	24.0	24.0
18	---	---	---	---	---	---	26.5	25.5	26.0	24.5	24.0	24.0
19	---	---	---	---	---	---	26.0	25.5	25.5	24.5	23.5	24.0
20	---	---	---	---	---	---	26.0	25.5	26.0	24.0	24.0	24.0
21	---	---	---	---	---	---	26.0	25.0	25.5	24.5	24.0	24.0
22	---	---	---	---	---	---	25.5	24.5	25.0	25.0	24.0	24.5
23	---	---	---	28.5	28.0	---	26.0	24.5	25.0	25.0	24.5	24.5
24	---	---	---	28.5	27.5	28.0	26.0	24.5	25.0	24.5	24.0	24.5
25	---	---	---	28.5	27.5	28.0	26.0	25.0	25.5	24.0	23.5	24.0
26	---	---	---	28.5	27.5	28.0	26.0	25.0	25.5	23.5	23.0	23.5
27	---	---	---	28.5	27.5	28.0	26.5	25.0	26.0	23.0	22.0	22.5
28	---	---	---	28.0	27.5	28.0	26.5	25.5	26.0	22.0	21.5	21.5
29	---	---	---	28.5	27.5	28.0	26.5	26.0	26.0	21.5	21.0	21.5
30	---	---	---	28.5	27.5	28.0	26.5	26.0	26.5	21.5	21.0	21.0
31	---	---	---	28.5	28.0	28.0	27.0	26.5	26.5	---	---	---
MONTH	22.0	19.0	20.0	28.5	27.5	28.0	31.0	24.5	27.5	28.5	21.0	25.0

01412350 DELAWARE BAY AT SHIP JOHN SHOAL LIGHTHOUSE, NJ--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	24200	18400	21500	24000	17600	21200	19200	11200	15600	---	---	---
2	24300	17300	21600	24600	17100	20800	19600	12300	15500	---	---	---
3	23600	17100	21100	22700	16100	19300	21400	10600	15900	---	---	---
4	23300	15600	19900	24300	16600	20000	18600	12100	16000	---	---	---
5	22700	15200	19200	24600	16200	20000	21000	11800	16300	---	---	---
6	19800	11200	15700	22800	15200	19400	19000	11100	15900	---	---	---
7	19000	9740	14400	21300	14300	18500	17900	13700	---	---	---	---
8	16700	8360	12300	21800	13300	17900	---	---	---	---	---	---
9	15600	7720	11900	21400	14700	18200	---	---	---	---	---	---
10	18200	8300	13000	21400	12400	17700	---	---	---	---	---	---
11	19100	7750	14300	20000	12800	17200	---	---	---	---	---	---
12	17500	8740	13000	23100	14800	18500	---	---	---	---	---	---
13	16600	8640	12000	24600	15600	19800	---	---	---	---	---	---
14	18900	8130	12000	25400	15500	20600	---	---	---	---	---	---
15	20900	7750	14500	24300	15500	20800	---	---	---	---	---	---
16	21200	11900	16000	23100	18500	21100	---	---	---	---	---	---
17	22000	14700	18700	22800	19400	21600	---	---	---	---	---	---
18	21400	16900	19300	23900	18900	21200	---	---	---	---	---	---
19	21600	16800	19400	24600	19100	22200	---	---	---	---	---	---
20	21500	16500	19400	25200	19100	22500	---	---	---	---	---	---
21	20900	15700	18400	25700	19000	22400	---	---	---	---	---	---
22	20500	15200	18000	25200	18700	22200	---	---	---	---	---	---
23	20800	14700	18100	24300	17100	21400	---	---	---	---	---	---
24	20500	14700	17500	23000	17700	20900	---	---	---	---	---	---
25	19300	13500	16700	23300	17600	20700	---	---	---	---	---	---
26	20700	13300	17500	23900	16900	21000	---	---	---	---	---	---
27	22500	15200	19100	20500	16100	18300	---	---	---	---	---	---
28	23100	15700	19900	23500	13600	17500	---	---	---	22200	16400	20400
29	22700	14600	19700	18900	11600	15400	---	---	---	23200	17400	20800
30	22800	17000	20300	18800	11600	15100	---	---	---	22600	14800	19600
31	23800	18000	20900	---	---	---	---	---	---	25600	17100	21300
MONTH	24300	7720	17300	25700	11600	19800	21400	10600	15900	25600	14800	20500

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	24900	19000	22200	29400	23800	26900	21300	11800	17700	19800	14000	17700
2	26400	19800	23600	31900	25100	28900	20500	9920	16100	---	---	---
3	26900	21400	24200	33300	27900	30900	17100	8890	13800	---	---	---
4	27900	21600	25000	32900	26900	31000	16200	8460	13200	---	---	---
5	28500	22600	26000	32600	28100	30600	15400	6960	11400	---	---	---
6	28700	24500	27200	31700	27600	29600	17600	7140	12300	---	---	---
7	30600	26200	28400	31700	26500	29500	17000	11200	14600	---	---	---
8	30900	25200	28500	31300	25700	28800	---	---	---	---	---	---
9	32400	24900	29100	30200	25900	28500	---	---	---	---	---	---
10	32100	25900	29200	31300	25700	28800	---	---	---	---	---	---
11	32100	25700	29500	31900	25200	28700	---	---	---	---	---	---
12	31700	26000	29500	29000	21400	26800	---	---	---	---	---	---
13	31300	26200	29500	32900	23800	28700	---	---	---	---	---	---
14	30600	26700	28700	31900	24500	28500	---	---	---	---	---	---
15	30900	25700	28400	29400	21800	25400	---	---	---	---	---	---
16	32400	26500	29000	29000	21400	25400	---	---	---	---	---	---
17	30400	24900	28000	30200	22200	26600	---	---	---	---	---	---
18	30400	24900	27800	29000	21500	25300	---	---	---	---	---	---
19	29400	23900	27400	27700	19600	24400	---	---	---	---	---	---
20	30400	25700	28200	27600	18500	23400	---	---	---	---	---	---
21	30200	24800	28200	27900	19200	23900	13500	6540	---	---	---	---
22	30400	25600	28400	23800	12500	19700	15900	6630	11200	---	---	---
23	30400	24900	28000	28300	11600	20700	16400	6940	11700	---	---	---
24	29000	24500	27300	27400	13100	20400	19400	8130	13600	---	---	---
25	29400	24900	27600	25900	12300	19700	19300	10300	15000	---	---	---
26	30200	26400	28400	25200	10600	18100	20100	12300	16000	---	---	---
27	31100	25700	28500	23300	11000	17800	20400	13000	17000	---	---	---
28	29800	24000	27600	24200	14000	19700	21300	15900	18500	---	---	---
29	28900	24500	27100	24900	16400	20800	21900	14400	19100	---	---	---
30	---	---	---	21400	15700	19100	20600	15400	18300	---	---	---
31	---	---	---	21900	16800	19500	---	---	---	---	---	---
MONTH	32400	19000	27600	33300	10600	25000	21900	6540	15000	19800	14000	17700

01412350 DELAWARE BAY AT SHIP JOHN SHOAL LIGHTHOUSE, NJ--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1							---	---	---	29400	25200	27500
2							---	---	---	29800	24500	27100
3							---	---	---	29200	22500	27000
4							---	---	---	30200	24800	27400
5							---	---	---	29600	25100	27400
6							---	---	---	29800	24300	27400
7							---	---	---	30200	25600	27500
8							---	---	---	30600	27100	28400
9							---	---	---	30400	26500	28700
10							---	---	---	29800	25600	27400
11							---	---	---	29800	25600	27900
12							---	---	---	29200	25700	27600
13							---	---	---	29400	25400	27800
14							25900	21200	---	29800	26000	28100
15							24300	19200	21600	29400	25200	27900
16							25200	19900	22100	32600	27200	29500
17							23500	20600	22100	32100	27700	30000
18							29400	23600	27100	30200	23600	28000
19							30200	23300	27200	30600	22600	28000
20							30200	22800	27600	29400	24800	26900
21							31700	26000	28900	30900	22800	27600
22							31700	27400	29700	31500	25900	28500
23							31500	27600	29600	31500	26400	29100
24							31500	27100	29400	33100	27100	30000
25							31700	25900	29200	33300	28500	31000
26							31700	27100	29200	33100	25900	29300
27							31500	26500	29100	30900	25700	28100
28							31300	26500	28900	29600	25200	27600
29							31500	26900	29500	32400	24500	28200
30							31300	26200	29100	31500	24900	29500
31							29800	24800	28100	---	---	---
MONTH							31700	19200	27600	33300	22500	28200

01412800 COHANSEY RIVER AT SEELEY, NJ

LOCATION.--Lat 39°28'21", long 75°15'21", Cumberland County, Hydrologic Unit 02040206, on right bank just downstream from bridge on Silver Lake Road, 0.6 mi (1.0 km) south of Seeley, 2.6 mi (4.2 km) east of Shiloh, 4.1 mi (6.6 km) north of Bridgeton, and 22.5 mi (36.2 km) upstream from mouth.

DRAINAGE AREA.--28.0 mi^2 (72.5 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1977 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 27 ft (8.2 m), from topographic map.

REMARKS.--Water-discharge records good. Flow diverted above gage during summer months for irrigation.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,490 ft^3/s (42.2 m^3/s) Feb. 25, 1979, gage height, 6.84 ft (2.084 m); minimum daily, 14 ft^3/s (0.40 m^3/s) Oct. 1-4, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 250 ft^3/s (7.08 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	(m^3/s)	Gage height (ft)	(m)
June 16	0830	316	8.95	5.14	1.567
June 30	1045	*471	13.3	5.51	1.679

Minimum discharge, 15 ft^3/s (0.42 m^3/s) Mar. 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	40	40	35	36	32	30	90	87	49	81	26	18
2	52	40	34	36	31	30	57	63	48	42	25	20
3	56	70	33	36	29	31	45	55	50	45	22	21
4	88	67	37	35	31	33	75	53	53	59	55	21
5	106	47	38	40	32	37	74	53	47	39	34	22
6	61	43	43	36	32	37	49	53	45	32	25	22
7	107	42	58	36	32	34	45	52	50	29	23	21
8	85	41	46	39	33	36	47	57	104	31	21	17
9	67	41	38	38	33	35	72	60	149	31	21	20
10	105	42	39	35	32	32	93	55	66	44	20	21
11	142	50	40	49	32	37	68	52	51	36	39	19
12	63	87	40	114	33	32	53	54	44	31	87	19
13	71	68	52	64	32	43	50	57	41	26	82	21
14	69	56	54	46	32	108	52	55	40	26	31	21
15	48	48	44	43	33	60	57	52	46	26	28	20
16	43	45	39	39	44	37	53	51	252	27	27	21
17	40	44	40	38	38	36	50	51	92	30	23	21
18	40	41	37	45	32	43	51	60	46	27	23	46
19	40	39	38	72	33	36	51	64	39	26	27	26
20	39	37	39	51	33	35	51	59	37	26	29	23
21	39	33	39	41	35	65	51	63	35	24	26	22
22	39	30	42	45	41	78	51	61	32	33	25	21
23	40	30	44	59	58	45	51	57	32	60	25	22
24	50	30	42	44	48	40	52	55	32	38	23	21
25	43	30	49	39	38	111	53	52	32	29	22	30
26	41	49	44	38	35	66	54	50	32	27	23	30
27	40	51	39	37	33	45	58	49	33	24	22	24
28	39	38	37	38	33	40	76	49	32	23	23	22
29	39	35	36	37	33	64	107	50	73	44	22	21
30	40	36	35	34	---	64	88	49	332	45	23	23
31	39	---	35	34	---	67	---	51	---	29	21	---
TOTAL	1811	1350	1266	1374	1013	1487	1824	1729	2014	1090	923	676
MEAN	58.4	45.0	40.8	44.3	34.9	48.0	60.8	55.8	67.1	35.2	29.8	22.5
MAX	142	87	58	114	58	111	107	87	332	81	87	46
MIN	39	30	33	34	29	30	45	49	32	23	20	17
CFSM	2.09	1.61	1.46	1.58	1.25	1.71	2.17	1.99	2.40	1.26	1.06	.80
IN.	2.41	1.79	1.68	1.83	1.35	1.98	2.42	2.30	2.68	1.45	1.23	.90

CAL YR 1979 TOTAL 18823 MEAN 51.6 MAX 1030 MIN 24 CFSM 1.84 IN 25.01
WTR YR 1980 TOTAL 16557 MEAN 45.2 MAX 332 MIN 17 CFSM 1.61 IN 22.00

01412800 COHANSEY RIVER AT SEELEY, NJ--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1975 to current year.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method, and selected water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIOCHEM UNINHIB 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)	HARD-NESS (MG/L AS CACO3)
OCT 03...	1030	59	155	6.7	19.0	7.3	2.8	>2400	>24000	47
JAN 30...	1200	34	214	6.4	4.0	8.6	.7	13	8	59
APR 02...	1100	56	162	6.5	10.0	11.4	.8	280	14	44
MAY 29...	1330	51	240	6.4	19.5	8.0	1.6	130	270	58
JUL 17...	1130	31	200	7.1	24.5	6.9	2.1	--	--	55
AUG 21...	1105	26	195	7.0	20.5	7.9	1.0	1300	540	51
SEP 23...	1140	22	230	7.0	22.0	8.2	3.4	330	200	60

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)
OCT 03...	9.4	5.6	7.0	5.8	7	0	6	--	15	13
JAN 30...	12	7.0	12	3.7	10	0	8	--	22	23
APR 02...	8.8	5.4	9.1	3.8	17	0	14	--	19	18
MAY 29...	11	7.4	14	3.6	27	0	22	--	22	26
JUL 17...	11	6.6	11	4.1	17	0	14	--	17	24
AUG 21...	10	6.4	11	4.4	20	0	16	--	18	24
SEP 23...	12	7.2	13	4.9	22	0	18	.0	22	28

DATE	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, ORTHOPH OSPHATE TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT 03...	.2	6.7	102	2.8	.400	.44	.84	3.6	1.8	9.3
JAN 30...	.1	8.3	126	5.6	.170	.13	.30	5.9	.11	3.0
APR 02...	.1	5.4	106	3.7	.260	1.0	1.3	5.0	.32	4.2
MAY 29...	.1	7.5	149	4.7	.110	.34	.45	5.2	.16	3.0
JUL 17...	.1	8.0	135	3.9	.210	.37	.58	4.5	.21	2.2
AUG 21...	.2	8.2	122	3.7	.030	.50	.53	4.2	.15	1.0
SEP 23...	.1	7.2	151	4.5	.100	.06	.16	4.7	.21	4.3

DATE	TIME	NITRO-GEN, NH4 + ORG. TOT IN BOT MAT (MG/KG AS N)	CARBON, INOR-GANIC, TOT IN BOT MAT (G/KG AS C)	CARBON, INORG + ORGANIC TOT. IN BOT MAT (G/KG AS C)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC TOTAL IN BOT-TOM MA-TERIAL (UG/G AS AS)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE)	BORON, TOTAL RECOV-ERABLE (UG/L AS B)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CD)
SEP 23...	1140	960	.0	5.9	40	1	0	0	60	0	<10

01412800 COHANSEY RIVER AT SEELEY, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, RECOV. FM BOTTOM MATERIAL (UG/G)	COBALT, RECOV. FM BOTTOM MATERIAL (UG/G AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, RECOV. FM BOTTOM MATERIAL (UG/G AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, RECOV. FM BOTTOM MATERIAL (UG/G AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, RECOV. FM BOTTOM MATERIAL (UG/G AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, RECOV. FM BOTTOM MATERIAL (UG/G)
SEP											
23...	20	<10	<10	2	<10	290	2000	2	<10	40	16

DATE	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MERCURY RECOV. FM BOTTOM MATERIAL (UG/G AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	NICKEL, RECOV. FM BOTTOM MATERIAL (UG/G AS NI)	SELENIUM, TOTAL (UG/L AS SE)	SELENIUM, TOTAL IN BOTTOM MATERIAL (UG/G)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, RECOV. FM BOTTOM MATERIAL (UG/G AS ZN)	PHENOLS (UG/L)	PCB, TOTAL IN BOTTOM MATERIAL (UG/KG)	PCN, TOTAL IN BOTTOM MATERIAL (UG/KG)
SEP											
23...	<.1	.00	4	<10	0	0	20	50	2	0	.0

DATE	ALDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	CHLORDANE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDD, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDT, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIAZINON, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIELDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ENDOSULFAN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ENDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ETHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR, TOTAL IN BOTTOM MATERIAL (UG/KG)
SEP											
23...	.0	2	12	12	7.3	.0	.3	.0	.0	.0	.0

DATE	HEPTACHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)	LINDANE TOTAL IN BOTTOM MATERIAL (UG/KG)	MALATHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	METHOXYCHLOR, TOT. IN BOTTOM MATL. (UG/KG)	METHYL PARATHION, TOT. IN BOTTOM MATL. (UG/KG)	METHYL TRITHION, TOT. IN BOTTOM MATL. (UG/KG)	MIREX, TOTAL IN BOTTOM MATERIAL (UG/KG)	PARATHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	PERTHANE IN BOTTOM MATERIL (UG/KG)	TOXAPHENE, TOTAL IN BOTTOM MATERIAL (UG/KG)	TRITHION, TOTAL IN BOTTOM MATERIAL (UG/KG)
SEP											
23...	.0	.0	.0	.0	.0	.0	.0	.0	.00	0	.0

01413015 COHANSEY RIVER AT BRIDGETON, NJ

LOCATION.--Lat 39°25'54", long 75°14'11", Cumberland County, Hydrologic Unit 02040206, at bridge on Washington Street in Bridgeton, 1.3 mi (2.1 km) downstream from Sunset Lake, and 18.6 mi (29.9 km) upstream from mouth.

DRAINAGE AREA.--47.3 mi² (122.5 km²).

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1975 to current year.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH FIELD (UNITS)	TEMPERATURE, WATER (DEG C)	OXYGEN, DISSOLVED (MG/L)	OXYGEN DEMAND, BIOCHEM UNINHIB 5 DAY (MG/L)	COLIFORM, FECAL, EC BROTH (MPN)	STREPTOCOCCI FECAL (MPN)	HARDNESS (MG/L AS CACO3)	CALCIUM DISSOLVED (MG/L AS CA)
OCT										
03...	1230	162	6.8	19.0	7.7	3.3	5400	9200	43	8.8
JAN										
30...	1330	183	6.5	3.5	9.6	.7	110	130	49	9.9
APR										
02...	1400	168	6.6	11.0	10.6	2.3	23	170	41	8.2
MAY										
29...	1230	280	6.5	21.0	7.3	5.5	2400	490	52	9.3
JUL										
17...	1300	176	7.0	26.5	2.8	4.2	--	--	46	9.0
AUG										
21...	0935	175	6.9	22.5	5.1	3.2	2300	490	45	8.5
SEP										
23...	0945	495	6.8	24.0	4.3	.9	490	3300	73	11

DATE	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)
OCT									
03...	5.2	9.8	4.3	7	0	6	15	15	.1
JAN									
30...	6.0	12	3.5	10	0	8	21	18	.1
APR									
02...	5.1	11	3.6	17	0	14	18	18	.1
MAY									
29...	7.0	29	3.9	29	0	24	22	43	.1
JUL									
17...	5.6	11	3.9	29	0	24	16	19	.1
AUG									
21...	5.7	13	4.4	28	0	23	17	22	.2
SEP									
23...	11	56	6.3	32	0	26	28	99	.1

DATE	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, ORTHOPHOSPHATE TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT									
03...	7.2	100	2.6	.600	.00	.60	3.2	.41	6.5
JAN									
30...	8.4	107	6.9	.260	.04	.30	7.2	.20	3.9
APR									
02...	6.3	108	3.4	.120	.88	1.0	4.4	.59	2.9
MAY									
29...	4.8	163	.43	.210	1.4	1.6	2.0	.08	3.4
JUL									
17...	7.8	100	2.5	.420	.68	1.1	3.6	.64	3.5
AUG									
21...	8.2	115	2.2	.080	.68	.76	3.0	.55	3.1
SEP									
23...	8.2	290	2.5	.210	.89	1.1	3.6	1.0	6.6

01434000 DELAWARE RIVER AT PORT JERVIS, NY

LOCATION.--Lat 41°22'14", long 74°41'52", Pike County, Pa., Hydrologic Unit 02040104, on right bank 250 ft (76 m) downstream from bridge (on U.S. Highways 6 and 209) between Port Jervis, N.Y. and Matamoras, Pa., 1.2 mi (1.9 km) upstream from Neversink River, and 6.5 mi (10.5 km) downstream from Mongaup River. Water-quality sampling site at discharge station.

DRAINAGE AREA.--3,076 mi^2 (7,967 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1904 to current year.

REVISED RECORDS.--WSP 756: Drainage area. WSP 1031: 1905-36. WRD NY 1971: 1970.

GAGE.--Water-stage recorder. Datum of gage is 415.35 ft (126.599 m) National Geodetic Vertical Datum of 1929. October 1904 to August 13, 1928, nonrecording gage at bridge 250 ft upstream at present datum; operated by U.S. Weather Bureau prior to June 20, 1914.

REMARKS.--Records good. Flow regulated by Lake Wallenpaupack and by Toronto, Cliff Lake, and Swinging Bridge Reservoirs (see Reservoirs in Delaware River Basin) and smaller reservoirs. Large diurnal fluctuations at medium and low flows caused by powerplants on tributary streams. Subsequent to September 1954, entire flow from 371 mi^2 (961 km^2) of drainage area controlled by Pepacton Reservoir, and subsequent to October 1963, entire flow from 454 mi^2 (1,176 km^2) of drainage area controlled by Cannonsville Reservoir (see Reservoirs in Delaware River Basin). Part of flow from these reservoirs diverted for New York City municipal supply. Remainder of flow (except for conservation releases and spill) impounded for release during periods of low flow in the lower Delaware River basin, as directed by the Delaware River Master.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 233,000 ft^3/s (6,600 m^3/s) Aug. 19, 1955, gage height, 23.91 ft (7.288 m), from floodmarks in gage house, from rating curve extended above 89,000 ft^3/s (2,520 m^3/s) on basis of slope-area measurement of peak flow; minimum observed, 175 ft^3/s (4.96 m^3/s) Sept. 23, 1908, gage height, 0.6 ft (0.18 m).

EXTREMES OUTSIDE PERIOD OF RECORD.--The U.S. Weather Bureau reported a discharge of 205,000 ft^3/s (5,810 m^3/s) Oct. 10, 1903, gage height, 23.1 ft (7.04 m), from rating curve extended above 70,000 ft^3/s (1,980 m^3/s) by velocity-area studies; stage on Mar. 8, 1904, was 25.5 ft (7.77 m), ice jam.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 73,400 ft^3/s (2,080 m^3/s) Mar. 22, gage height, 12.28 ft (3.743 m); minimum, 869 ft^3/s (24.6 m^3/s) Jan. 31, gage height, 1.78 ft (0.543 m); minimum daily, 1,110 ft^3/s (31.4 m^3/s) May 29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2550	2260	7500	3510	2010	2200	15300	14500	1430	3350	1520	1840
2	6370	2230	6290	2990	2100	1500	14600	12500	1640	2550	1820	1650
3	6250	6260	6190	3600	1410	1400	13300	10900	1800	2230	1970	1640
4	7020	11100	6410	3340	1620	2200	13000	8840	1890	1880	2250	1680
5	6690	7780	6000	2800	1800	1810	14200	7220	1460	1350	2740	1720
6	10100	6410	5540	1900	1700	1660	12100	7090	1640	1430	2560	1740
7	10500	5450	4620	1980	1800	1460	10500	7480	1860	1960	2280	1830
8	8080	4810	3720	2740	1600	1710	8970	5290	1870	2280	2190	1550
9	7190	4200	3030	2780	1800	3000	9590	4330	1610	2060	2040	1510
10	6930	3520	3240	2660	1600	3840	20500	3330	2010	2010	1420	1580
11	6590	3480	3730	2630	1400	2950	20200	3280	2270	2030	1510	1550
12	5920	3440	3650	2790	1600	2650	15200	4370	1930	1730	1650	1700
13	5310	3330	3470	2700	1600	2320	13000	3670	1570	1740	1650	1860
14	4290	3030	3840	2770	1400	2460	12600	3700	1400	1530	1710	1710
15	3930	2680	3410	2690	1500	1500	16000	3260	1560	1940	1790	1690
16	4540	2540	2620	2510	1800	1270	16700	2740	1500	1980	1810	1740
17	4450	2630	2680	2520	1500	1720	14200	2290	1860	2070	1630	1860
18	4250	2360	3460	2910	1500	4640	12400	2120	1730	1850	1370	1920
19	3740	2240	3570	2450	1400	12200	10300	2530	1700	1480	1520	2080
20	3040	2270	2970	1830	1600	8770	8470	2370	1660	1350	1270	1930
21	2050	2410	2990	1750	1800	12600	7800	2290	1630	1490	1440	1690
22	2230	2200	2970	2080	1400	59100	7780	2190	1830	2280	1430	1670
23	3180	1960	2220	2380	1900	25500	6720	2000	1640	1880	1640	1830
24	3600	2050	2160	2180	1400	15500	6180	1770	1680	1950	1580	1620
25	4310	2030	3270	2330	1180	14800	5680	1550	1680	1750	1530	1720
26	4450	4290	6820	2080	1300	13400	5170	1390	1760	1720	1850	1700
27	2790	28700	6110	1770	1400	10600	3590	1370	1620	1540	1850	1640
28	2060	18200	5130	1910	1700	9900	3540	1260	1680	1330	1890	1690
29	2230	11900	4280	1650	1600	11100	8070	1110	1730	1280	1850	1550
30	2540	9240	3380	1440	---	15500	14500	1240	2450	1240	1900	1780
31	2410	---	3460	1510	---	15700	---	1400	---	1780	1920	---
TOTAL	149590	165000	128730	75180	46420	264960	340160	129380	52090	57040	55580	51670
MEAN	4825	5500	4153	2425	1601	8547	11340	4174	1736	1840	1793	1722
MAX	10500	28700	7500	3600	2100	59100	20500	14500	2450	3350	2740	2080
MIN	2050	1960	2160	1440	1180	1270	3540	1110	1400	1240	1270	1510

CAL YR 1979 TOTAL 2204670 MEAN 6040 MAX 63000 MIN 1210
WTR YR 1980 TOTAL 1515800 MEAN 4142 MAX 59100 MIN 1110

01434000 DELAWARE RIVER AT PORT JERVIS, NY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1957-60, 1964 to current year.
CHEMICAL DATA: 1958-59 (e), 1964-65 (c), 1966 (a), 1967-68 (c), 1969-76 (d).
MINOR ELEMENTS DATA: 1970 (a), 1972-73 (a), 1974-76 (c).
PESTICIDE DATA: 1974 (a).
ORGANIC DATA: OC--1974 (b), 1975 (d).
NUTRIENT DATA: 1968 (a), 1969-76 (d).
BIOLOGICAL DATA:
Bacteria--1973-76 (d).
Phytoplankton--1974 (b), 1975-76 (c).
Periphyton--1976 (a).
SEDIMENT DATA: 1959 (c), 1976 (c).

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: January 1973 to September 1973.
WATER TEMPERATURES: February 1957 to September 1960, January 1973 to September 1973, June 1974 to current year.
SUSPENDED-SEDIMENT DISCHARGE: February 1957 to September 1960, March 1970 to June 1976.

INSTRUMENTATION.--Temperature recorder since January 1973.

REMARKS.--No temperature record May 23-27, due to instrument malfunctions.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum (water years 1957-59, 1973-80), 29.5°C July 19, 1959, Aug. 3, 1975; minimum (water years 1958-60, 1973, 1975-80), freezing point on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum, 28.0°C July 21; minimum, freezing point on many days during winter period.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	17.0	16.0	16.5	8.5	7.0	8.0	4.5	3.5	4.0	1.5	.0	1.0
2	16.5	15.5	16.0	10.5	8.5	9.5	3.5	2.0	2.5	1.0	.0	.5
3	16.5	16.0	16.5	10.5	8.5	9.5	2.0	1.5	2.0	1.0	.0	.5
4	16.0	15.5	16.0	8.5	7.5	8.0	3.0	1.5	2.5	.5	.0	.0
5	16.0	15.5	16.0	7.5	6.5	7.0	3.5	2.5	3.0	.5	.0	.0
6	15.5	14.5	14.5	7.0	6.5	6.5	4.0	3.0	3.5	1.0	.0	.0
7	14.5	13.0	13.5	7.0	6.5	7.0	4.5	3.5	4.0	.0	.0	.0
8	14.0	12.0	12.5	7.0	6.5	6.5	4.5	3.0	4.0	.5	.0	.0
9	12.5	11.5	12.0	7.5	6.5	7.0	3.0	2.0	2.5	.5	.0	.0
10	11.5	10.0	11.0	8.0	7.5	8.0	2.5	2.0	2.5	.5	.0	.0
11	10.0	9.5	10.0	8.0	7.5	7.5	5.0	2.5	3.0	.5	.0	.0
12	10.0	9.5	10.0	8.0	7.5	7.5	4.5	3.0	4.0	.5	.0	.0
13	11.0	9.5	10.0	7.5	7.5	7.5	4.5	4.0	4.5	.5	.0	.0
14	10.0	8.5	9.0	7.5	6.5	7.5	4.0	3.0	3.5	.0	.0	.0
15	9.0	8.0	8.5	6.5	5.5	6.0	2.5	2.0	2.5	1.0	.0	.5
16	10.5	8.5	9.5	5.5	4.0	5.0	2.0	1.0	2.0	1.0	.0	.5
17	10.5	9.5	10.0	5.0	3.5	4.5	2.0	.0	1.0	1.0	.0	.5
18	12.0	9.5	11.0	5.5	4.0	4.5	.5	.0	.0	1.5	.5	1.0
19	12.5	11.0	11.5	5.5	4.0	5.0	.5	.0	.0	1.5	1.0	1.5
20	13.5	11.5	12.5	6.0	4.5	5.5	.0	.0	.0	1.5	.5	1.0
21	15.0	13.0	14.0	6.5	5.5	6.0	.5	.0	.0	1.0	.0	.5
22	16.0	14.0	15.0	7.0	6.5	6.5	1.0	.0	.5	.0	.0	.0
23	16.0	15.0	15.5	7.5	6.5	7.0	1.5	1.0	1.5	1.0	.0	.5
24	15.5	13.5	14.5	9.0	7.5	8.5	1.5	1.5	1.5	1.0	.0	.0
25	13.5	11.5	12.5	10.0	9.0	9.5	3.0	1.5	2.5	.5	.0	.0
26	11.5	10.0	11.0	12.0	10.0	11.0	2.5	2.0	2.0	.5	.0	.0
27	10.0	8.0	9.0	11.0	10.0	10.5	2.0	1.5	2.0	.5	.0	.0
28	8.0	7.0	7.5	10.0	8.0	8.5	2.0	1.5	1.5	.5	.0	.0
29	7.5	7.0	7.0	8.0	6.0	7.0	2.5	2.0	2.0	.0	.0	.0
30	8.0	7.5	7.5	6.0	4.0	5.0	2.0	1.5	2.0	.5	.0	.0
31	8.0	7.0	7.5	---	---	---	1.5	1.0	1.0	.5	.0	.0
MONTH	17.0	7.0	12.0	12.0	3.5	7.0	5.0	.0	2.0	1.5	.0	.5

01434000 DELAWARE RIVER AT PORT JERVIS, NY--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	.0	.0	.0	.0	.0	.0	4.5	3.0	4.0	12.0	10.0	11.0
2	.5	.0	.0	.0	.0	.0	5.5	4.0	4.5	13.0	11.5	12.0
3	.0	.0	.0	.0	.0	.0	5.5	4.0	5.0	14.0	12.0	13.0
4	.0	.0	.0	.0	.0	.0	6.0	5.5	5.5	15.0	13.5	14.0
5	.0	.0	.0	.0	.0	.0	6.0	5.5	6.0	15.5	13.5	14.5
6	.0	.0	.0	.5	.0	.0	6.5	5.5	6.0	15.0	14.0	14.5
7	.0	.0	.0	.5	.0	.0	7.5	6.0	7.0	16.0	14.5	15.5
8	.5	.0	.0	.0	.0	.0	8.0	7.0	7.5	15.0	14.0	14.5
9	.0	.0	.0	.5	.0	.0	8.0	8.0	8.0	14.5	12.5	13.5
10	.0	.0	.0	.5	.0	.0	8.5	8.0	8.0	14.0	11.5	13.0
11	.0	.0	.0	.5	.0	.0	8.5	7.5	8.0	13.0	12.5	13.0
12	.0	.0	.0	.5	.0	.0	8.5	7.5	8.0	14.0	12.5	13.5
13	.5	.0	.0	.0	.0	.0	9.0	8.0	8.5	15.0	13.5	14.5
14	.0	.0	.0	.0	.0	.0	9.0	7.5	8.5	16.5	14.0	15.5
15	.0	.0	.0	1.0	.0	.5	8.0	7.5	7.5	17.0	14.5	15.5
16	.0	.0	.0	2.0	.0	1.0	8.0	6.5	7.5	16.5	13.5	15.0
17	.5	.0	.0	3.0	.5	1.0	6.5	5.5	6.0	17.5	14.0	16.0
18	.0	.0	.0	2.0	.5	1.5	7.5	6.0	6.5	16.5	15.5	15.5
19	.0	.0	.0	1.0	.0	.5	8.5	6.5	7.5	17.5	15.0	16.5
20	.0	.0	.0	2.0	.5	1.0	9.5	8.0	9.0	18.5	16.0	17.5
21	.0	.0	.0	2.5	1.0	2.0	11.0	9.0	10.0	17.5	16.5	17.0
22	.0	.0	.0	1.5	.5	1.0	11.0	9.0	10.0	19.0	16.0	17.5
23	.0	.0	.0	2.5	1.0	2.0	11.5	9.5	10.5	---	---	---
24	.0	.0	.0	3.0	2.0	2.5	12.5	10.5	11.5	---	---	---
25	.0	.0	.0	3.0	3.0	3.0	12.0	11.5	12.0	---	---	---
26	.0	.0	.0	3.0	2.5	3.0	12.5	11.5	12.0	---	---	---
27	.0	.0	.0	4.0	2.5	3.0	12.0	11.0	11.5	---	---	---
28	.0	.0	.0	4.5	3.5	4.0	11.0	9.5	10.5	20.5	17.0	19.0
29	.0	.0	.0	4.5	4.5	4.5	9.5	9.0	9.0	21.5	18.0	19.5
30	---	---	---	4.5	4.0	4.0	10.0	9.0	9.5	20.0	19.0	19.5
31	---	---	---	4.0	3.5	4.0	---	---	---	21.0	19.0	20.0
MONTH	.5	.0	.0	4.5	.0	1.0	12.5	3.0	8.0	21.5	10.0	15.5

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	23.5	20.0	21.5	21.0	19.0	20.0	25.0	23.5	24.5	24.0	22.5	23.5
2	23.0	21.5	22.0	20.5	19.5	20.0	26.0	23.5	24.5	24.5	23.0	24.0
3	23.0	21.0	22.0	20.5	19.5	20.0	25.5	23.5	24.5	24.0	22.5	23.5
4	21.5	20.0	21.0	23.0	19.5	21.0	26.0	24.0	25.0	23.5	22.0	23.0
5	22.0	19.0	20.5	22.5	21.0	22.0	25.5	23.5	24.5	23.5	22.0	22.5
6	21.5	19.0	20.5	23.0	21.0	22.0	24.5	23.0	24.0	23.5	21.5	22.5
7	21.0	19.5	20.0	23.0	20.0	21.5	25.5	23.0	24.5	23.0	21.5	22.0
8	21.0	18.5	20.0	22.0	20.5	21.0	26.0	24.0	25.0	21.5	20.0	21.0
9	18.5	16.0	17.0	23.5	20.0	22.0	26.0	25.0	25.5	20.5	19.5	20.0
10	16.5	15.0	16.0	24.5	21.5	23.0	25.5	24.0	25.0	21.0	20.0	20.5
11	16.5	15.0	16.0	24.0	21.5	23.0	26.0	25.0	25.5	20.5	19.0	20.0
12	18.5	14.5	17.0	24.0	21.5	23.0	25.5	24.5	25.0	20.0	19.0	19.5
13	20.0	16.5	18.5	24.0	21.0	22.5	25.0	23.0	24.0	20.0	19.0	19.5
14	21.5	18.0	20.0	25.0	22.0	23.5	24.0	22.5	23.0	20.5	19.5	20.0
15	23.0	20.5	22.0	24.5	22.5	23.5	23.0	22.0	22.5	20.5	18.5	19.5
16	23.0	21.0	22.0	25.0	22.0	23.5	22.5	21.5	22.0	18.5	17.0	18.0
17	23.0	20.0	21.5	25.5	23.0	24.5	22.5	20.5	21.5	19.0	17.0	17.5
18	22.0	19.5	21.0	26.5	23.0	24.5	22.0	21.0	22.0	18.5	18.0	18.5
19	23.0	19.0	21.0	26.0	23.5	25.0	21.5	21.0	21.5	18.5	17.0	18.0
20	22.0	19.0	20.0	27.0	24.5	26.0	22.0	21.0	21.5	19.0	17.5	18.0
21	21.5	18.0	19.5	28.0	26.0	27.0	21.5	20.5	21.0	20.0	18.5	19.5
22	21.5	18.5	20.0	27.5	24.5	26.0	21.5	20.5	21.0	21.5	19.5	20.5
23	22.5	20.0	21.5	25.5	23.5	24.5	22.5	20.5	21.5	21.5	20.5	21.0
24	24.0	20.5	22.5	25.5	23.0	24.5	22.5	21.0	22.0	20.5	19.0	19.5
25	25.0	22.0	23.5	25.5	22.5	24.0	23.5	21.5	22.5	19.0	17.0	18.0
26	26.0	23.0	24.5	25.5	23.0	24.5	24.0	22.0	23.0	17.5	17.0	17.0
27	26.0	23.0	24.5	26.5	24.0	25.0	24.5	22.5	23.5	17.0	15.5	16.0
28	24.5	22.5	24.0	26.0	24.5	25.0	24.5	23.0	24.0	15.5	14.5	15.0
29	23.0	21.5	22.0	25.0	24.0	24.5	24.5	23.0	24.0	15.5	14.0	14.5
30	22.0	20.5	21.5	25.0	23.5	24.5	24.5	23.0	24.0	16.5	14.5	15.0
31	---	---	---	25.0	23.0	24.0	24.5	23.0	24.0	---	---	---
MONTH	26.0	14.5	21.0	28.0	19.0	23.5	26.0	20.5	23.5	24.5	14.0	19.5

01437500 NEVERSINK RIVER AT GODEFFROY, NY

LOCATION.--Lat 41°26'28", long 74°36'07", Orange County, Hydrologic Unit 02040104, on right bank just upstream from highway bridge on Graham Road, 0.5 mi (0.8 km) downstream from Basher Kill, 0.8 mi (1.3 km) southeast of Godeffroy, 1.7 mi (2.7 km) south of Cuddebackville, and 8.5 mi (13.7 km) upstream from mouth.

DRAINAGE AREA.--302 mi^2 (782 km^2).

PERIOD OF RECORD.--August to October 1903, August 1909 to April 1914 (gage heights and discharge measurements, also twice-daily figures of discharge for January 1911 to December 1912, which do not represent daily mean discharges because of diurnal fluctuation), and July 1937 to current year. August to October 1903, published as "Navesink River at Godeffroy, NY."

REVISED RECORDS.--WSP 821: Drainage area. WSP 1502: 1951(M).

GAGE.--Water-stage recorder. Datum of gage is 459.66 ft (140.104 m) National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers). Prior to Apr. 30, 1914, nonrecording gages at same site (August to October 1903 at datum 0.98 ft or 0.299 m higher).

REMARKS.--Records good except those for winter periods, which are poor. Prior to 1949, diurnal fluctuation at low and medium flow caused by powerplant at Cuddebackville. Subsequent to June 1953, entire flow from 91.8 mi^2 (237.8 km^2) of drainage area controlled by Neversink Reservoir (see Reservoirs in Delaware River Basin). Part of flow diverted for New York City municipal supply. Remainder of flow (except for conservation releases and spill), impounded for release during periods of low flow in the lower Delaware River basin, as directed by the Delaware River Master.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 33,000 ft^3/s (935 m^3/s) Aug. 19, 1955, gage height, 12.49 ft (3.087 m), from rating curve extended above 11,000 ft^3/s (312 m^3/s) on basis of slope-area measurement of peak flow; practically no flow several times in July 1911.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 9,340 ft^3/s (265 m^3/s) Mar. 21, gage height 9.37 ft (2.856 m); minimum discharge, 68 ft^3/s (1.93 m^3/s) Aug. 30, 31, Sept. 4, 5, 13, 23; minimum gage height, 2.77 ft (0.844 m) Aug. 30, 31.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	563	292	603	319	130	120	1210	1050	187	342	85	93
2	1270	288	538	306	130	110	1160	885	177	227	95	96
3	851	980	476	290	120	110	953	772	184	213	114	94
4	971	811	441	241	120	100	1100	663	201	183	115	70
5	927	624	413	245	120	107	1140	578	175	159	103	76
6	2180	544	391	209	120	114	940	516	158	232	159	80
7	1320	500	386	207	118	123	831	472	181	197	121	76
8	1080	458	360	213	111	172	743	435	217	160	101	73
9	893	424	330	194	110	290	1380	398	204	150	98	73
10	819	435	316	182	109	240	2890	370	190	141	115	73
11	718	476	301	216	106	263	1940	357	174	131	115	73
12	638	458	292	322	107	220	1470	444	163	124	92	71
13	624	424	298	245	105	173	1240	433	153	109	90	72
14	550	418	308	265	104	183	1100	460	143	104	91	73
15	494	391	276	259	106	206	1280	402	136	99	91	75
16	458	370	264	239	111	199	1190	352	135	99	92	73
17	424	355	303	228	110	197	990	321	131	103	85	79
18	396	340	249	225	110	679	780	317	124	102	82	104
19	386	325	226	222	110	725	688	365	122	116	81	89
20	365	311	226	200	116	582	606	337	123	115	83	77
21	345	297	233	180	120	2170	536	326	125	112	82	74
22	325	288	264	170	127	5350	492	319	118	139	81	73
23	316	283	264	160	129	3040	455	291	113	147	80	70
24	325	274	294	150	137	2410	424	266	110	113	76	73
25	320	288	530	160	141	2040	401	246	107	96	75	75
26	297	659	585	163	139	1620	383	224	126	90	74	82
27	279	1680	462	166	126	1330	376	204	131	87	75	80
28	288	980	409	163	124	1200	728	194	120	85	74	78
29	320	803	382	147	120	1400	1810	183	105	86	73	74
30	292	681	362	140	---	1530	1300	175	592	91	71	71
31	270	---	344	140	---	1320	---	174	---	87	70	---
TOTAL	19304	15457	11126	6566	3436	28323	30536	12529	4925	4239	2839	2340
MEAN	623	515	359	212	118	914	1018	404	164	137	91.6	78.0
MAX	2180	1680	603	322	141	5350	2890	1050	592	342	159	104
MIN	270	274	226	140	104	100	376	174	105	85	70	70

CAL YR 1979 TOTAL 191302 MEAN 524 MAX 3100 MIN 88
WTR YR 1980 TOTAL 141620 MEAN 387 MAX 5350 MIN 70

01438500 DELAWARE RIVER AT MONTAGUE, NJ

LOCATION.--Lat 41°18'33", long 74°47'44", Sussex County, Hydrologic Unit 02040104, on right bank 0.4 mi (0.6 km) upstream from toll bridge on U.S. Route 206 at Montague, 0.8 mi (1.3 km) downstream from Sawkill Creek, and at mile 246.3 (396.3 km). Water-quality samples collected from toll bridge.

DRAINAGE AREA.--3,480 mi^2 (9,013 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--March 1936 to September 1939 (gage heights only, published as "at Milford, PA"). October 1939 to current year. Monthly discharge only for some periods, published in WSP 1302.

GAGE.--Water-stage recorder. Datum of gage is 369.93 ft (112.755 m) National Geodetic Vertical Datum of 1929. Prior to Feb. 9, 1940, nonrecording gage on upstream side of left span of subsequently dismantled bridge at present site at datum 70 ft (21.3 m) lower.

REMARKS.--Water-discharge records good. Diurnal fluctuations at medium and low flow caused by powerplants on tributary streams. Flow regulated by Lake Wallenpaupack and by Pepacton, Cannonsville, Swinging Bridge, Toronto, Cliff Lake, and Neversink Reservoirs (see Delaware River Basin, reservoirs in) and smaller reservoirs. Diversion from Pepacton, Cannonsville, and Neversink Reservoirs (see Delaware River Basin, diversions).

AVERAGE DISCHARGE.--41 years, 5,931 ft^3/s (168.0 m^3/s), unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 250,000 ft^3/s (7,080 m^3/s) Aug. 19, 1955, gage height, 35.15 ft (10.714 m), from rating curve extended above 90,000 ft^3/s (2,550 m^3/s) on basis of flood-routing study; minimum, 382 ft^3/s (10.8 m^3/s) Aug. 24, 1954, gage height, 3.83 ft (1.167 m), minimum daily, 412 ft^3/s (11.7 m^3/s) Aug. 23, 1954.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of October 10, 1903, reached a stage of 35.5 ft (10.82 m) from floodmark, present datum.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 69,800 ft^3/s (1,980 m^3/s) Mar. 22, gage height, 18.48 ft (5.633 m); minimum, 1,030 ft^3/s (29.2 m^3/s) Sept. 25, gage height, 4.48 ft (1.366 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2920	2840	8750	4370	1550	2400	17700	15200	1740	3800	1800	1990
2	8110	2730	7320	3340	2300	1650	17000	13100	1730	3030	2070	1800
3	7990	6130	6930	4070	1500	1600	15700	11200	2230	2620	2160	1870
4	8360	12900	7230	3650	1750	2300	15100	8840	2220	2280	2480	1720
5	8290	9160	6810	3400	2000	1900	16500	7840	1740	1660	2930	1910
6	13100	7470	6370	2200	1850	1800	14300	8620	1870	1750	2990	1740
7	13100	6400	5420	2100	1900	1700	12300	7140	2080	2010	2640	1980
8	9840	5650	4700	3100	1750	1800	10500	6230	2210	2620	2560	1710
9	8830	5050	3760	3000	1950	3100	11300	5370	1850	2360	2490	1650
10	8210	4280	3680	3000	1700	4000	23300	4690	2260	2250	1640	1680
11	7960	4220	4320	2900	1600	3700	23200	3920	2540	2320	1640	1640
12	7100	4170	4240	3100	1750	2900	17900	4340	2270	2100	1880	1760
13	6560	4060	4170	3040	1750	2500	15300	4970	1900	1990	1870	1930
14	5390	3800	4300	3030	1600	3000	14500	4360	1690	1610	1780	1820
15	4720	3390	4180	3100	1650	1850	17800	4310	1710	2180	2000	1720
16	5370	3160	3270	3000	1950	1600	18600	3650	1650	2190	1990	1950
17	5240	3210	3120	2700	1700	1850	15900	3100	2030	2340	1790	1910
18	5030	2980	3800	3310	1700	4900	13900	2730	1990	2110	1490	2160
19	4540	2790	4100	3000	1600	13600	11400	2800	1880	1860	1700	2130
20	4000	2760	3400	2190	1800	10100	9470	3110	1920	1540	1370	2130
21	2770	2890	3400	1890	2000	12700	8850	2910	1820	1550	1490	1790
22	2670	2750	3600	2280	1650	58300	8490	2770	2030	2590	1550	1720
23	3750	2420	2800	2670	2100	30500	7290	2590	1810	2170	1660	2050
24	4160	2510	2730	2560	1750	20100	6780	2330	1920	2230	1660	1720
25	4830	2430	3600	2500	1350	18300	6230	1990	1830	2070	1640	1730
26	5160	4590	7510	2400	1450	16900	5400	1800	1920	2040	1890	1850
27	3560	27100	7100	2000	1450	13800	4130	1620	1840	1780	1990	1780
28	2640	20500	5970	2000	1900	12400	5900	1700	1840	1600	1980	1690
29	2760	13900	5210	1950	1700	13400	14800	1410	1910	1560	2000	1610
30	3140	10700	4090	1600	---	17900	17500	1470	2940	1490	1960	1960
31	2990	---	3940	1850	---	18000	---	1660	---	1940	2020	---
TOTAL	183090	186940	149820	85300	50700	300550	397040	147770	59370	65640	61110	55100
MEAN	5906	6231	4833	2752	1748	9695	13230	4767	1979	2117	1971	1837
MAX	13100	27100	8750	4370	2300	58300	23300	15200	2940	3800	2990	2160
MIN	2640	2420	2730	1600	1350	1600	4130	1410	1650	1490	1370	1610

CAL YR 1979 TOTAL 2475590 MEAN 6782 MAX 57200 MIN 1500
WTR YR 1980 TOTAL 1742430 MEAN 4761 MAX 58300 MIN 1350

01439830 BIG FLAT BROOK AT TUTTLES CORNER, NJ

LOCATION.--Lat 41°12'00", long 74°48'56", Sussex County, Hydrologic Unit 02040104, at bridge on State Route 521 in Tuttles Corner, 0.7 mi (1.1 km) west of intersection of U.S. Route 206 with State Route 521, 1.2 mi (1.9 km) south of Layton, and 2.0 mi (3.2 km) upstream from Little Flat Brook.

DRAINAGE AREA.--28.3 mi² (73.3 km²).

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1964, 1976 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIOCHEM UNINHIB 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)	HARD-NESS (MG/L AS CACO3)
OCT										
15...	1030	--	--	--	6.5	11.8	--	330	49	22
MAR										
12...	0945	41	82	7.9	.0	14.3	E1.5	<20	17	24
MAY										
06...	1000	75	61	7.1	14.0	9.6	.6	<20	7	21
JUL										
21...	1115	10	114	8.3	22.0	8.8	--	--	--	37
AUG										
14...	0945	E7.4	110	6.9	--	10.4	<.3	50	240	45
SEP										
25...	1000	18	110	7.7	13.0	9.9	<.1	<20	170	45

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
OCT									
15...	6.1	1.6	2.4	.6	8	.0	10	3.7	.1
MAR									
12...	6.4	2.0	2.7	.6	15	--	12	4.3	.1
MAY									
06...	5.6	1.6	2.5	.6	13	--	11	3.9	.1
JUL									
21...	9.6	3.1	4.3	.7	26	--	11	6.1	.1
AUG									
14...	12	3.6	4.6	.7	35	--	9.7	6.1	.1
SEP									
25...	12	3.7	4.4	.7	29	.5	10	5.4	.1

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, ORTHOPH OSPHATE TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT									
15...	5.2	46	<1.0	--	--	.72	--	.01	2.7
MAR									
12...	4.6	53	.27	.050	--	--	--	.70	3.6
MAY									
06...	3.7	44	.08	.110	.23	.34	.42	.08	5.2
JUL									
21...	4.7	67	.15	.090	.44	.53	.68	.33	--
AUG									
14...	5.5	66	.12	.060	.41	.47	.59	.06	1.8
SEP									
25...	5.7	66	.14	.080	.29	.37	.51	.06	2.6

01439830 BIG FLAT BROOK AT TUTTLES CORNER, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	NITROGEN, NH4 + ORG. TOT IN BOT MAT (MG/KG AS N)	CARBON, INORGANIC, TOT IN BOT MAT (G/KG AS C)	CARBON, INORG + ORGANIC TOT. IN BOT MAT (G/KG AS C)	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC TOTAL IN BOTTOM MATERIAL (UG/G AS AS)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	BORON, TOTAL RECOVERABLE (UG/L AS B)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM RECOV. FM BOTTOM MATERIAL (UG/G AS CD)
OCT											
15...	1030	--	--	--	30	0	--	0	20	0	--
SEP											
25...	1000	2200	.6	19	20	0	0	0	20	0	<10

DATE	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, RECOV. FM BOTTOM MATERIAL (UG/G)	COBALT, RECOV. FM BOTTOM MATERIAL (UG/G AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, RECOV. FM BOTTOM MATERIAL (UG/G AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, RECOV. FM BOTTOM MATERIAL (UG/G AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, RECOV. FM BOTTOM MATERIAL (UG/G AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, RECOV. FM BOTTOM MATERIAL (UG/G)
OCT											
15...	10	--	--	2	--	140	--	0	--	20	--
SEP											
25...	30	<10	<10	0	<10	120	4600	0	20	20	400

DATE	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MERCURY RECOV. FM BOTTOM MATERIAL (UG/G AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	NICKEL, RECOV. FM BOTTOM MATERIAL (UG/G AS NI)	SELENIUM, TOTAL (UG/L AS SE)	SELENIUM, TOTAL IN BOTTOM MATERIAL (UG/G)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, RECOV. FM BOTTOM MATERIAL (UG/G AS ZN)	PHENOLS (UG/L)	PCB, TOTAL IN BOTTOM MATERIAL (UG/KG)	PCN, TOTAL IN BOTTOM MATERIAL (UG/KG)
OCT											
15...	.2	--	1	--	0	--	20	--	2	--	--
SEP											
25...	<.1	.00	2	<10	0	0	20	52	1	0	.0

DATE	ALDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	CHLORDANE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDD, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDT, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIAZINON, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIELDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ENDOSULFAN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ENDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ETHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR, TOTAL IN BOTTOM MATERIAL (UG/KG)
OCT											
15...	--	--	--	--	--	--	--	--	--	--	--
SEP											
25...	.0	2	.9	.0	.9	.0	.0	.0	.0	.0	.0

DATE	HEPTACHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)	LINDANE TOTAL IN BOTTOM MATERIAL (UG/KG)	MALATHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	METHOXYCHLOR, TOT. IN BOTTOM MATL. (UG/KG)	METHYL PARATHION, TOT. IN BOTTOM MATL. (UG/KG)	METHYL TRITHION, TOT. IN BOTTOM MATL. (UG/KG)	MIREX, TOTAL IN BOTTOM MATERIAL (UG/KG)	PARATHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	PERTHANE IN BOTTOM MATERIL (UG/KG)	TOXAPHENE, TOTAL IN BOTTOM MATERIAL (UG/KG)	TRITHION, TOTAL IN BOTTOM MATERIAL (UG/KG)
OCT											
15...	--	--	--	--	--	--	--	--	--	--	--
SEP											
25...	.0	.0	.0	.0	.0	.0	.0	.0	.00	0	.0

01440000 FLAT BROOK NEAR FLATBROOKVILLE, NJ

LOCATION.--Lat 41°06'24", long 74°57'09", Sussex County, Hydrologic Unit 02040104, on right bank 1.0 mi (1.6 km) upstream from Flatbrookville, and 1.5 mi (2.4 km) upstream from mouth. Water-quality samples collected at bridge 0.7 mi (1.1 km) downstream from gage at high flows.

DRAINAGE AREA.--65.1 mi^2 (168.6 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1923 to current year.

REVISED RECORDS.--WSP 781: Drainage area. WSP 1432: 1924(M), 1928(M), 1929, 1930(M), 1932, 1933(M), 1936, 1938(M), 1939-40, 1949(M), 1952-53(M).

GAGE.--Water-stage recorder. Concrete control since Aug. 19, 1929. Datum of gage is 347.73 ft (105.988 m) National Geodetic Vertical Datum of 1929. Prior to Jan. 6, 1926, nonrecording gage at same site and datum.

REMARKS.--Water-discharge records good. No gage-height record Dec. 14 to Jan. 18. Flow occasionally regulated by ponds above station.

AVERAGE DISCHARGE.--57 years, 109 ft^3/s (3.087 m^3/s) 22.74 in/yr (578 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,560 ft^3/s (271 m^3/s) Aug. 19, 1955, gage height, 12.58 ft (3.834 m) from high-water mark in gage house, from rating curve extended above 2,000 ft^3/s (56.6 m^3/s) on basis of slope-area measurement of peak flow; minimum, 3.6 ft^3/s (0.10 m^3/s) Sept. 25, 26, 1964, Sept. 11, 1966.

REVISIONS.--The maximum discharge for the water year 1970 has been revised to 2,710 ft^3/s (76.7 m^3/s) Apr. 3, 1970, gage height, 7.04 ft (2.146 m), superseding figure published in WSP 2102.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 650 ft^3/s (18.4 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Oct. 6	0845	*1080	30.6	4.53	1.381	Apr. 10	1330	874	24.8	4.15	1.265
Mar. 22	0530	1030	29.2	4.45	1.356	Apr 29	0530	916	25.9	4.23	1.289

Minimum discharge, 6.2 ft^3/s (0.18 m^3/s) Sept. 15, 16, 17, gage height, 1.74 ft (0.530 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	134	76	147	100	51	54	355	330	61	66	28	8.9
2	333	75	134	95	47	50	331	263	56	42	23	10
3	212	271	121	88	51	49	271	226	80	47	29	9.1
4	227	260	115	84	52	36	295	200	84	43	24	8.7
5	265	175	110	78	50	32	289	174	58	43	21	8.5
6	854	152	108	76	52	33	226	161	49	107	19	9.3
7	391	138	119	72	49	39	196	148	48	61	16	8.8
8	269	126	114	71	44	55	178	143	49	44	16	8.1
9	214	116	103	64	43	83	266	131	48	36	14	7.6
10	211	140	94	70	42	66	713	120	49	32	13	7.5
11	217	158	91	170	42	91	452	114	46	29	24	7.3
12	190	158	89	155	41	73	317	130	42	34	20	7.3
13	174	141	92	122	40	51	264	138	39	35	18	7.3
14	150	139	116	118	40	51	268	121	37	28	16	7.0
15	135	126	100	106	39	75	344	104	35	24	16	6.8
16	125	118	107	102	39	77	278	95	34	25	14	6.7
17	115	111	102	96	43	56	226	87	31	28	13	7.5
18	110	105	94	93	42	332	198	84	29	27	12	51
19	103	99	91	87	46	286	182	86	28	23	[illegible]	30
20	99	94	88	82	43	195	167	82	28	21	14	18
21	93	91	87	75	43	316	155	90	28	20	13	14
22	89	88	88	71	47	832	141	113	27	18	12	12
23	86	87	105	72	48	412	132	86	28	24	12	11
24	97	85	165	64	54	352	126	75	24	25	11	9.7
25	93	84	190	63	55	413	120	67	23	20	10	9.1
26	83	167	165	60	54	317	115	60	22	17	9.8	9.3
27	79	476	148	58	46	267	117	55	21	16	9.6	8.8
28	86	250	132	60	47	246	316	53	20	15	9.2	8.7
29	101	193	125	68	43	304	850	52	21	17	8.9	8.5
30	86	164	112	74	---	355	510	49	137	58	8.8	8.6
31	80	---	108	64	---	314	---	48	---	36	8.5	---
TOTAL	5501	4463	3560	2658	1333	5912	8398	3685	1282	1061	476.8	335.1
MEAN	177	149	115	85.7	46.0	191	280	119	42.7	34.2	15.4	11.2
MAX	854	476	190	170	55	832	850	330	137	107	29	51
MIN	79	75	87	58	39	32	115	48	20	15	8.5	6.7
CFSM	2.72	2.29	1.77	1.32	.71	2.93	4.30	1.83	.66	.53	.24	.17
IN.	3.14	2.55	2.03	1.52	.76	3.38	4.80	2.11	.73	.61	.27	.19

CAL YR 1979 TOTAL 56037.0 MEAN 154 MAX 1600 MIN 16 CFSM 2.37 IN 32.02
WTR YR 1980 TOTAL 38664.9 MEAN 106 MAX 854 MIN 6.7 CFSM 1.63 IN 22.09

01440200 DELAWARE RIVER BELOW TOCKS ISLAND DAMSITE, NEAR DELAWARE WATER GAP, PA

LOCATION.--Lat 41°00'42", long 75°05'09", Warren County, Hydrologic Unit 02040105, on left bank 40 ft (12 m) streamward from River Road, 1.0 mi (1.6 km) downstream from Tocks Island, 3.7 mi (6.0 km) northeast of Delaware Water Gap, PA, 4.0 mi (6.4 km) upstream from bridge on Interstate Highway 80, and at mile 216.1 (347.7 km).

DRAINAGE AREA.--3,850 mi² (9,970 km²) approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1964 to current year.

GAGE.--Water-stage recorder. Datum of gage is 293.64 ft (89.501 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Water-discharge records good except those from January 15 through June 18, which are fair. Diurnal fluctuation at medium and low flow caused by powerplants on tributary streams. Flow regulated by Lake Wallenpaupack, and by Pepacton, Cannonsville, Swinging Bridge, Toronto, Cliff Lake, and Neversink Reservoirs (see Delaware River Basin, reservoirs in) and smaller reservoirs. Diversion from Pepacton, Cannonsville, and Neversink Reservoirs (see Delaware River Basin, diversions).

AVERAGE DISCHARGE.--16 years, 6,590 ft³/s (186.6 m³/s), unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 103,000 ft³/s (2,920 m³/s) June 30, 1973, gage height, 23.82 ft (7.260 m); minimum daily, 580 ft³/s (16.4 m³/s) July 7, 8, 1965.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 75,200 ft³/s (2,130 m³/s) Mar. 22, gage height, 18.69 ft (5.697 m); minimum daily discharge, 1,430 ft³/s (40.5 m³/s) Aug. 21.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3090	3490	11200	5330	1700	1600	21200	18900	2200	3960	2160	2100
2	8290	3380	9150	4090	2000	2000	20400	15900	2230	4030	1960	1950
3	10500	5010	8080	4810	2200	1800	18800	13900	2760	3240	2050	2030
4	10200	14300	8560	4540	1900	1850	17300	11100	2850	2800	2480	1680
5	10900	11700	8080	4270	2000	2240	19400	9210	2570	2130	2950	1900
6	16800	9080	7550	3530	2100	2070	17300	10200	2210	2380	3120	1780
7	17800	7780	6660	2500	2100	1870	14700	9030	2420	2200	2860	1830
8	13000	6840	6170	2800	2000	1850	12400	7880	2690	2910	2710	1930
9	11600	6210	4940	3000	2100	2710	12400	6900	2530	2770	2540	1700
10	10100	5500	4400	2900	2000	4040	25300	5400	2660	2560	1820	1620
11	10300	5240	4990	3450	1900	4550	30200	5280	2560	2560	1580	1620
12	9010	5220	5080	4250	1850	3440	22900	5120	3070	2440	1960	1710
13	8370	5070	5120	4110	1900	3130	18700	6400	2570	2000	1940	1850
14	7010	4800	5120	3610	2000	3450	16900	5650	2210	1990	1810	1830
15	6010	4290	5230	4000	1900	3840	19900	5520	1830	2230	2010	1810
16	6410	3950	4300	4000	1950	2390	22900	4970	2040	2360	1980	2000
17	6340	3830	3740	3460	1700	2050	19500	4250	2310	2420	1840	1890
18	6150	3740	4200	4020	1800	4230	16700	3660	2210	2380	1760	2420
19	5740	3500	4500	3890	1850	14500	14200	3460	1990	2050	1690	2170
20	5140	3380	4120	3060	2000	12900	11400	3890	2030	1490	1520	2300
21	3780	3380	4400	2710	2100	13200	10300	3720	1900	1610	1430	1830
22	3400	3410	4360	2710	2150	61100	10200	3780	1880	2280	1630	1840
23	4210	3090	3680	3130	2020	45500	8860	3550	2050	2570	1580	2160
24	4800	2990	3350	2800	2210	26100	8060	3210	2120	2310	1670	1830
25	5270	2940	3890	2500	1820	21900	7470	2840	1750	2250	1700	1850
26	5810	4270	7660	2600	1780	21000	6860	2480	1940	2050	1830	1960
27	5090	26300	8870	2500	1750	16700	5360	2230	2000	1740	2070	1900
28	3500	30000	7360	2600	1700	14100	5850	2210	1790	1710	2000	1950
29	3340	18300	6530	2300	1650	14800	15600	1870	1750	1580	2070	1800
30	3640	13600	5260	2100	---	20100	21600	1780	2700	1650	1950	2030
31	3680	---	4870	1750	---	21200	---	1960	---	1600	2010	---
TOTAL	229280	224590	181420	103320	56130	352210	472660	187250	67820	72250	62680	57270
MEAN	7396	7486	5852	3333	1936	11360	15760	6040	2261	2331	2022	1909
MAX	17800	30000	11200	5330	2210	61100	30200	18900	3070	4030	3120	2420
MIN	3090	2940	3350	1750	1650	1600	5360	1780	1750	1490	1430	1620

CAL YR 1979 TOTAL 3109180 MEAN 8518 MAX 58000 MIN 1530
WTR YR 1980 TOTAL 2066880 MEAN 5647 MAX 61100 MIN 1430

01443000 DELAWARE RIVER AT PORTLAND, PA

LOCATION.--Lat 40°55'26", long 75°05'46", Northampton County, Hydrologic Unit 02040105, at walkbridge connecting Portland, PA and Columbia, NJ, and 0.5 mi (0.8 km) upstream of Paulins Kill.

DRAINAGE AREA.--4,165 mi^2 (10,787 km^2).

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1976 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIOCHEM UNINHIB 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)	HARD-NESS (MG/L AS CACO3)
OCT 16...	0930	--	--	--	8.0	10.6	1.0	<20	9	25
MAR 25...	0945	--	55	7.2	3.0	12.3	1.5	80	350	17
JUN 02...	1000	--	93	7.5	21.0	9.5	1.4	50	15	28
JUL 14...	1000	E2520	83	8.1	24.0	7.9	<1.3	130	<2	28
AUG 18...	0930	E2090	82	7.6	23.0	8.2	6.3	80	5	28
SEP 29...	1030	E1970	92	7.6	16.5	9.4	<.1	<20	4	28

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
OCT 16...	7.6	1.5	3.2	.6	8	--	11	4.4	.1
MAR 25...	4.8	1.1	3.3	1.0	16	--	8.7	4.3	.0
JUN 02...	8.4	1.6	3.9	.7	16	.0	13	6.2	.1
JUL 14...	8.5	1.6	3.9	.9	20	--	9.9	6.2	.1
AUG 18...	8.3	1.8	4.8	1.0	17	--	11	6.2	.1
SEP 29...	8.7	1.6	3.6	.9	16	.0	9.7	5.7	.1

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, ORTHOPH OSPHATE TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT 16...	3.5	48	<1.0	.500	.00	.50	--	.05	3.5
MAR 25...	3.0	40	.35	.110	1.3	1.4	1.8	.01	--
JUN 02...	1.2	59	.38	.170	.37	.54	.92	.30	1.6
JUL 14...	1.1	62	.15	.150	.40	.55	.70	.37	9.1
AUG 18...	1.5	52	.05	.050	.42	.47	.52	.09	1.0
SEP 29...	.9	50	.13	.210	.30	.51	.64	.09	4.2

DELAWARE RIVER BASIN

01443000 DELAWARE RIVER AT PORTLAND, PA--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	BORON, TOTAL RECOVERABLE (UG/L AS B)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)
JUN								
02...	1000	10	0	0	20	0	10	4
SEP								
29...	1030	20	0	0	8	0	10	1

DATE	IRON, TOTAL RECOVERABLE (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	PHENOLS (UG/L)
JUN								
02...	100	13	30	<.1	4	0	10	2
SEP								
29...	100	34	30	.1	2	0	20	6

01443440 PAULINS KILL AT BALESVILLE, NJ

LOCATION.--Lat 41°06'20", long 74°45'19", Sussex County, Hydrologic Unit 02040105, at bridge on unnamed road at Balesville, 2.2 mi (3.5 km) downstream from Dry Brook, and 3.4 mi (5.5 km) north of Newton.

DRAINAGE AREA.--67.1 mi² (173.8 km²).

WATER-QUALITY RECORDS

PERIOD OF RECORD.--January 1979 to current year.

COOPERATION.--Selected field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIOCHEM UNINHIB 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)	HARD-NESS (MG/L AS CACO3)
OCT 15...	1200	149	--	--	8.0	11.4	--	790	220	120
FEB 28...	1030	60	512	7.9	.0	13.0	E.5	700	11	170
APR 21...	1200	140	370	8.3	13.5	12.0	2.0	50	11	130
JUN 02...	1015	92	440	7.4	18.5	8.1	1.9	5400	920	140
JUL 14...	1000	30	440	7.9	19.5	8.2	E2.0	790	79	170
AUG 14...	0945	E23	502	7.9	21.0	7.0	1.8	700	130	210
SEP 25...	1145	16	550	8.5	16.5	8.9	<.1	230	540	240

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
OCT 15...	33	10	16	1.7	95	.0	22	30	.1
FEB 28...	45	15	24	2.1	130	--	34	44	.1
APR 21...	34	12	15	1.5	100	--	22	28	.1
JUN 02...	31	14	23	1.4	130	--	26	34	.1
JUL 14...	43	16	26	1.9	150	--	22	42	.1
AUG 14...	52	19	24	2.6	170	--	28	45	.2
SEP 25...	60	22	29	2.5	180	.3	32	56	.2

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, ORTHOPH OSPHATE TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT 15...	6.3	197	1.0	.700	.50	1.2	2.2	.36	4.6
FEB 28...	5.8	279	1.5	.470	--	--	--	.30	3.7
APR 21...	3.1	203	.65	.120	.47	.59	1.2	.13	3.9
JUN 02...	4.7	270	1.1	.180	.46	.64	1.6	.56	3.1
JUL 14...	3.3	278	.94	.180	.32	.50	1.4	.41	6.5
AUG 14...	8.4	315	.36	.170	.80	.97	1.3	1.0	3.2
SEP 25...	6.1	345	.83	.070	.38	.45	1.3	.77	5.0

01443440 PAULINS KILL AT BALESVILLE, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC TOTAL IN BOTTOM MATERIAL (UG/G AS AS)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	BORON, TOTAL RECOVERABLE (UG/L AS B)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM RECOV. FM BOTTOM MATERIAL (UG/G AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, RECOV. FM BOTTOM MATERIAL (UG/G)
OCT										
15...	1200	30	1	0	0	30	0	<10	10	10
SEP										
25...	1145	20	1	--	0	40	0	--	20	--

DATE	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, RECOV. FM BOTTOM MATERIAL (UG/G AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, RECOV. FM BOTTOM MATERIAL (UG/G AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, RECOV. FM BOTTOM MATERIAL (UG/G AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, RECOV. FM BOTTOM MATERIAL (UG/G)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MERCURY RECOV. FM BOTTOM MATERIAL (UG/G AS HG)
OCT										
15...	3	<10	310	14000	0	10	50	370	.2	.00
SEP										
25...	1	--	260	--	45	--	80	--	<.1	--

DATE	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	SELENIUM, TOTAL IN BOTTOM MATERIAL (UG/G)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, RECOV. FM BOTTOM MATERIAL (UG/G AS ZN)	PHENOLS (UG/L)	PCB, TOTAL IN BOTTOM MATERIAL (UG/KG)	PCN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ALDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	CHLORDANE, TOTAL IN BOTTOM MATERIAL (UG/KG)
OCT										
15...	2	0	0	20	70	2	3	.0	.0	7
SEP										
25...	1	0	--	10	--	0	--	--	--	--

DATE	DDD, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDT, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIAZINON, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIELDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ENDOSULFAN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ENDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ETHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)
OCT										
15...	2.7	1.5	1.7	.0	.0	.0	.0	.0	.0	.0
SEP										
25...	--	--	--	--	--	--	--	--	--	--

DATE	LINDANE TOTAL IN BOTTOM MATERIAL (UG/KG)	MALATHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	METHOXYCHLOR, TOT. IN BOTTOM MATL. (UG/KG)	METHYL PARATHION, TOT. IN BOTTOM MATL. (UG/KG)	METHYL TRITHION, TOT. IN BOTTOM MATL. (UG/KG)	MIREX, TOTAL IN BOTTOM MATERIAL (UG/KG)	PARATHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	PERTHANE IN BOTTOM MATERIL (UG/KG)	TOXAPHENE, TOTAL IN BOTTOM MATERIAL (UG/KG)	TRITHION, TOTAL IN BOTTOM MATERIAL (UG/KG)
OCT										
15...	.0	.0	.0	.0	.0	.0	.0	.00	0	.0
SEP										
25...	--	--	--	--	--	--	--	--	--	--

01443500 PAULINS KILL AT BLAIRSTOWN, NJ

LOCATION.--Lat 40°58'44", long 74°57'15", Warren County, Hydrologic Unit 02040105, on right bank 1,200 ft (370 m) upstream from bridge on State Highway 94 in Blairstown, 1,400 ft (430 m) upstream from Blairs Creek, and 10 mi (16 km) upstream from mouth. Water-quality samples collected at bridge 1,200 ft (370 m) downstream from gage at high flows.

DRAINAGE AREA.--126 mi² (326 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1921 to September 1976, October 1977 to current year.

REVISED RECORDS.--WSP 971: 1942. WSP 1382: 1952-53(M).

GAGE.--Water-stage recorder and concrete control (Aug. 1, 1931, to Aug. 3, 1941, concrete control at site 280 ft or 85 m, downstream). Datum of gage is 335.86 ft (102.370 m) National Geodetic Vertical Datum of 1929. Prior to May 24, 1922, nonrecording gage and May 24, 1922, to July 31, 1931, water-stage recorder, at site of former highway bridge 1,300 ft (400 m) downstream at different datum. Aug. 1, 1931 to July 28, 1939, water-stage recorder at site 100 ft (30 m) downstream at present datum.

REMARKS.-Water-discharge records fair. Diurnal fluctuation caused by powerplant above station and flow regulated slightly by Swartswood Lake.

AVERAGE DISCHARGE.--58 years, (water years 1922-76, 1978-80) 194 ft³/s (5.494 m³/s), 20.91 in/yr (531 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,750 ft³/s (248 m³/s) Aug. 19, 1955, gage height, 11.12 ft (3.389 m) from high-water mark in gage house; minimum, about 2.8 ft³/s (0.08 m³/s) Nov. 1, 1922; minimum daily, 5 ft³/s (0.14 m³/s) Aug. 13, 14, 1930.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,000 ft³/s (28.3 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Oct. 6	0600	*1280	36.2	4.14	1.262	Apr. 10	1100	1000	28.3	3.33	1.015
Mar. 22	0515	1250	35.4	4.04	1.231	Apr. 29	1615	1190	33.7	3.85	1.173

Minimum discharge, 18 ft³/s (0.51 m³/s) Sept. 17, gage height, 1.45 ft (0.442 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	233	158	240	205	83	75	604	736	120	84	61	22
2	457	153	224	195	88	80	540	539	170	64	54	21
3	361	237	204	187	85	71	469	445	180	61	75	23
4	374	246	192	173	88	72	533	376	136	59	75	25
5	487	236	186	163	83	72	556	323	126	56	60	23
6	1100	254	184	149	80	74	448	291	106	183	55	24
7	613	242	213	143	79	75	391	268	99	135	48	23
8	460	226	212	140	77	88	367	268	96	100	40	22
9	410	214	191	135	77	112	432	244	91	85	39	20
10	395	236	177	124	76	109	892	223	98	74	35	20
11	423	286	149	146	74	155	671	213	95	65	34	20
12	376	292	162	347	74	140	514	232	87	71	60	20
13	346	275	185	269	71	114	461	270	78	65	51	19
14	305	258	239	229	72	106	469	250	72	56	41	19
15	276	240	209	219	72	125	590	213	65	49	40	19
16	263	226	189	213	81	116	500	191	64	47	38	19
17	251	211	225	194	77	120	415	173	60	55	33	19
18	241	198	191	187	78	662	366	161	57	53	31	32
19	232	191	179	196	79	565	332	160	55	47	30	40
20	221	185	178	190	78	373	305	154	54	42	37	29
21	214	182	172	174	80	539	282	159	53	39	38	25
22	202	175	172	162	92	1180	259	176	52	37	34	23
23	196	171	173	157	93	928	239	162	48	67	31	22
24	197	165	198	142	113	754	223	144	49	71	30	22
25	187	166	327	128	130	795	214	126	49	57	29	21
26	177	232	376	127	121	668	203	118	46	48	27	20
27	168	461	306	118	101	526	207	114	44	40	24	20
28	175	357	271	117	95	450	434	110	41	37	23	20
29	178	299	250	110	84	496	1130	102	41	41	23	20
30	172	255	235	101	---	552	1010	110	85	87	23	20
31	164	---	220	93	---	507	---	124	---	74	22	---
TOTAL	9854	7027	6629	5233	2481	10699	14056	7175	2417	2049	1241	672
MEAN	318	234	214	169	85.6	345	469	231	80.6	66.1	40.0	22.4
MAX	1100	461	376	347	130	1180	1130	736	180	183	75	40
MIN	164	153	149	93	71	71	203	102	41	37	22	19
CFSM	2.52	1.86	1.70	1.34	.68	2.74	3.72	1.83	.64	.53	.32	.18
IN.	2.91	2.07	1.96	1.54	.73	3.16	4.15	2.12	.71	.60	.37	.20

CAL YR 1979 TOTAL 102016 MEAN 279 MAX 2700 MIN 42 CFSM 2.21 IN 30.12
WTR YR 1980 TOTAL 69533 MEAN 190 MAX 1180 MIN 19 CFSM 1.51 IN 20.53

01443500 PAULINS KILL AT BLAIRSTOWN, NJ--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1921, 1925, 1957-60, 1962-63, 1976 to current year.

COOPERATION.--Selected field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIOCHEM UNINHIB 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)	HARD-NESS (MG/L AS CACO3)
OCT 11...	1000	431	267	--	9.0	11.0	1.0	130	540	110
MAR 20...	1115	366	223	7.8	3.5	12.0	E2.4	1100	540	75
JUN 02...	1145	E170	400	7.5	20.5	7.4	1.2	220	130	160
JUL 14...	1115	56	355	7.8	20.5	6.8	E1.9	110	49	140
AUG 14...	1130	40	393	8.6	23.0	7.0	1.7	50	79	160
SEP 29...	1015	20	460	7.6	14.0	8.3	<.3	20	8	190

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
OCT 11...	27	9.4	13	1.4	78	.0	18	21	.1
MAR 20...	19	6.7	11	1.8	54	--	14	19	.1
JUN 02...	39	15	14	1.0	130	--	22	25	.1
JUL 14...	32	14	16	1.5	120	--	18	27	.1
AUG 14...	36	16	17	1.8	130	--	20	32	.1
SEP 29...	45	20	23	1.8	160	--	23	41	.2

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, ORTHOPH OSPHATE TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT 11...	6.1	156	<1.0	.300	.36	.66	--	.19	4.7
MAR 20...	3.6	134	.59	.210	1.1	1.3	1.9	.25	7.5
JUN 02...	2.5	240	.55	.160	.59	.75	1.3	.19	2.5
JUL 14...	2.4	214	.25	.140	.96	1.1	1.4	.29	3.7
AUG 14...	3.7	229	.43	<.030	--	.72	1.2	.28	3.0
SEP 29...	2.4	275	.13	.310	.42	.73	.86	.09	.1

DATE	TIME	NITRO-GEN, NH4 + ORG. TOT IN BOT MAT (MG/KG AS N)	CARBON, INOR-GANIC, TOT IN BOT MAT (G/KG AS C)	CARBON, INORG + ORGANIC TOT. IN BOT MAT (G/KG AS C)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC TOTAL IN BOT-TOM MA-TERIAL (UG/G AS AS)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE)	BORON, TOTAL RECOV-ERABLE (UG/L AS B)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CD)
OCT 11...	1000	--	--	--	40	1	--	0	30	0	--
SEP 29...	1015	1550	1.0	9.2	--	--	0	--	--	--	<10

01443500 PAULINS KILL AT BLAIRSTOWN, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, RECOV. FM BOTTOM MATERIAL (UG/G)	COBALT, RECOV. FM BOTTOM MATERIAL (UG/G AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, RECOV. FM BOTTOM MATERIAL (UG/G AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, RECOV. FM BOTTOM MATERIAL (UG/G AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, RECOV. FM BOTTOM MATERIAL (UG/G AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, RECOV. FM BOTTOM MATERIAL (UG/G)
OCT											
11...	10	--	--	4	--	310	--	1	--	30	--
SEP											
29...	--	<10	<10	--	<10	--	3700	--	20	--	250

DATE	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MERCURY RECOV. FM BOTTOM MATERIAL (UG/G AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	NICKEL, RECOV. FM BOTTOM MATERIAL (UG/G AS NI)	SELENIUM, TOTAL (UG/L AS SE)	SELENIUM, TOTAL IN BOTTOM MATERIAL (UG/G)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, RECOV. FM BOTTOM MATERIAL (UG/G AS ZN)	PHENOLS (UG/L)	PCB, TOTAL IN BOTTOM MATERIAL (UG/KG)	PCN, TOTAL IN BOTTOM MATERIAL (UG/KG)
OCT											
11...	.2	--	3	--	0	--	10	--	0	--	--
SEP											
29...	--	.00	--	<10	--	0	--	36	--	0	.0

DATE	ALDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	CHLORDANE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDD, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDT, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIAZINON, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIELDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ENDOSULFAN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ENDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ETHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR, TOTAL IN BOTTOM MATERIAL (UG/KG)
OCT											
11...	--	--	--	--	--	--	--	--	--	--	--
SEP											
29...	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0

DATE	HEPTACHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)	LINDANE TOTAL IN BOTTOM MATERIAL (UG/KG)	MALATHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	METHOXYCHLOR, TOT. IN BOTTOM MATL. (UG/KG)	METHYL PARATHION, TOT. IN BOTTOM MATL. (UG/KG)	METHYL TRITHION, TOT. IN BOTTOM MATL. (UG/KG)	MIREX, TOTAL IN BOTTOM MATERIAL (UG/KG)	PARATHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	PERTHANE IN BOTTOM MATERIL (UG/KG)	TOXAPHENE, TOTAL IN BOTTOM MATERIAL (UG/KG)	TRITHION, TOTAL IN BOTTOM MATERIAL (UG/KG)
OCT											
11...	--	--	--	--	--	--	--	--	--	--	--
SEP											
29...	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0

01443900 YARDS CREEK NEAR BLAIRSTOWN, NJ

LOCATION.--Lat 40°58'51", long 75°02'25", Warren County, Hydrologic Unit 02040105, on left bank 100 ft (30 m) upstream from bridge on Hainesburg-Mount Vernon Road, 2.2 mi (3.5 km) northeast of Hainesburg, 2.4 mi (3.9 km) upstream from mouth, and 4.2 mi (6.8 km) west of Blairstown.

DRAINAGE AREA.--7.16 mi^2 (18.54 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1966 to current year.

REVISED RECORDS.--WDR-NJ-77-2: 1976. WDR-NJ-79-2: 1977 (m).

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 608 ft (185 m), from topographic map.

REMARKS.--Water-discharge records fair except those after May 13, which are poor. Complete regulation by the Jersey Central Power and Light Co., at Yards Creek Reservoir above station.

AVERAGE DISCHARGE.--14 years, 11.3 ft^3/s (0.320 m^3/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 583 ft^3/s (16.5 m^3/s), Feb. 24, 1977, gage height, 3.92 ft (1.195 m); no flow Sept. 12, 1971.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 128 ft^3/s (3.62 m^3/s) Mar. 24, gage height, 3.04 ft (0.927 m); minimum daily, 0.49 ft^3/s (.014 m^3/s) Aug. 25.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.3	9.8	15	13	5.3	6.0	25	16	1.7	.73	.71	.52
2	2.8	10	14	12	5.6	5.0	40	15	1.3	.74	.73	.52
3	11	17	12	12	3.3	6.3	30	15	3.2	.80	1.2	.62
4	15	12	12	12	3.0	5.3	22	13	1.5	.81	.70	.54
5	27	11	12	13	4.1	4.5	20	13	1.1	1.2	.71	.64
6	24	12	12	12	.88	3.7	18	13	1.0	1.4	.71	.64
7	19	12	12	11	5.4	1.8	18	14	1.1	.67	.66	.58
8	15	12	11	11	7.0	2.0	18	16	1.1	.73	.50	.51
9	62	12	10	12	3.9	1.9	22	21	.98	.75	.64	.54
10	116	15	10	8.8	3.5	1.5	23	21	1.2	.76	.63	.53
11	68	13	12	6.4	3.2	2.3	22	20	1.1	.82	.55	.50
12	15	12	11	7.6	3.4	1.8	20	26	.97	1.3	.57	.55
13	14	12	13	5.4	3.3	1.6	19	49	.94	.82	.60	.61
14	13	12	13	4.8	3.4	2.8	20	39	.94	.69	.53	.61
15	9.8	12	16	4.8	3.8	2.2	27	19	.89	.71	.62	.55
16	2.9	12	12	4.8	3.9	1.9	35	16	.79	.71	.64	.56
17	2.6	12	11	4.9	3.5	2.9	36	7.1	.73	.87	.59	.58
18	2.5	11	12	5.0	3.5	12	36	6.7	.74	.70	.54	.77
19	2.4	11	12	5.1	3.5	6.8	35	7.7	.73	.68	.78	.61
20	2.5	12	12	4.7	3.7	5.2	33	9.7	.79	.67	.87	.61
21	3.6	12	12	4.4	4.2	20	32	12	.74	.60	.84	.62
22	2.7	12	12	4.5	4.2	40	30	11	.66	.68	.64	.55
23	12	10	11	4.3	4.5	22	21	9.3	.61	1.5	.63	.56
24	14	11	12	4.6	4.5	69	21	8.7	.68	.70	.57	.58
25	11	11	15	5.6	4.0	121	20	2.8	.70	.67	.49	.60
26	11	21	12	5.4	3.6	86	13	1.3	.71	1.4	.51	.64
27	11	18	12	4.9	4.6	21	14	1.2	.71	1.4	.55	.63
28	11	14	13	4.0	4.2	20	21	1.3	.71	1.1	.55	.62
29	9.2	13	12	4.6	4.5	23	20	1.4	.72	1.3	.54	.58
30	10	13	12	5.4	---	20	17	1.5	.92	.86	.56	.58
31	11	---	12	6.6	---	20	---	1.8	---	.70	.56	---
TOTAL	535.3	376.8	379	224.6	115.48	539.5	728	409.5	29.96	27.47	20.12	17.55
MEAN	17.3	12.6	12.2	7.25	3.98	17.4	24.3	13.2	1.00	.89	.65	.59
MAX	116	21	16	13	7.0	121	40	49	3.2	1.5	1.2	.77
MIN	2.4	9.8	10	4.0	.88	1.5	13	1.2	.61	.60	.49	.50

CAL YR 1979 TOTAL 6087.84 MEAN 16.7 MAX 170 MIN .77
WTR YR 1980 TOTAL 3403.28 MEAN 9.30 MAX 121 MIN .49

01444100 PAULINS KILL AT MOUTH AT COLUMBIA, NJ

LOCATION.--Lat 40°55'14", long 75°05'18", Warren County, Hydrologic Unit 02040206, at bridge on U.S. Route 46 in Columbia, 2.3 mi (3.7 km) southwest of Polkville, and 3.2 mi (5.2 km) southeast of Knowlton.

DRAINAGE AREA.--177 mi² (458 km²).

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1976 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIOCHEM UNINHIB 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)	HARD-NESS (MG/L AS CACO3)
OCT										
11...	1200	530	--	--	9.0	11.3	<1.0	490	180	94
MAR										
05...	1100	--	390	8.5	.5	14.5	--	<20	4	140
APR										
22...	1100	530	299	7.0	12.5	11.0	1.8	140	33	110
JUN										
02...	1300	--	355	7.6	20.0	8.2	1.4	330	23	150
JUL										
14...	1315	--	385	7.9	23.0	8.2	E1.9	40	8	140
AUG										
14...	1230	--	370	8.4	23.0	8.0	.9	130	12	160
SEP										
29...	1200	--	455	7.6	15.0	10.0	<.1	70	33	190

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
OCT									
11...	24	8.2	9.9	1.3	64	.0	18	16	.1
MAR									
05...	34	14	16	1.6	120	--	26	29	.1
APR									
22...	27	11	11	1.1	91	--	19	17	.1
JUN									
02...	38	13	13	1.0	130	.0	23	21	.1
JUL									
14...	33	14	14	1.4	120	--	18	24	.1
AUG									
14...	37	16	14	1.6	140	--	20	27	.1
SEP									
29...	45	20	19	1.9	160	.0	24	37	.1

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, ORTHOPH OSPHATE TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT									
11...	5.7	136	<1.0	.500	.40	.90	--	.19	4.6
MAR									
05...	2.2	216	1.1	.120	.30	.42	1.5	<.01	2.8
APR									
22...	3.0	161	.55	.150	.12	.27	.82	.04	3.1
JUN									
02...	1.4	243	.75	.150	.45	.60	1.4	.29	3.3
JUL									
14...	3.0	210	.44	.160	.60	.76	1.2	.19	7.5
AUG									
14...	3.4	231	.46	.120	.54	.66	1.1	.24	1.6
SEP									
29...	2.1	264	.13	.160	.60	.76	.89	.15	3.1

01444100 PAULINS KILL AT MOUTH AT COLUMBIA, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	BORON, TOTAL RECOVERABLE (UG/L AS B)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)
OCT								
11...	1200	50	1	0	30	0	10	4
JUN								
02...	1300	10	1	0	40	0	<10	2
SEP								
29...	1200	30	1	0	30	0	10	1

DATE	IRON, TOTAL RECOVERABLE (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	PHENOLS (UG/L)
OCT								
11...	280	2	40	.2	10	0	20	0
JUN								
02...	200	30	70	.4	3	0	10	2
SEP								
29...	180	0	40	.1	1	0	10	1

01444800 DELAWARE RIVER NEAR RICHMOND, PA (BELVIDERE, NJ)

LOCATION.--Lat 40°49'44", long 75°05'06", Warren County, NJ, Hydrologic Unit 02040104, at bridge at Belvidere, 200 ft (61 m) upstream from Pequest River, and 4.1 mi (6.5 km) southwest of Buttzville.

DRAINAGE AREA.--4,380 mi² (11,344 km²).

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1964, 1976 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIOCHEM UNINHIB 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)
OCT 16...	1130	E8160	--	--	9.0	11.0	1.0	130	34
MAR 25...	1200	E25200	65	--	3.0	12.4	1.3	50	170
JUN 02...	1215	E2860	119	7.5	21.0	8.8	1.5	<20	15
JUL 14...	1145	E2500	102	8.1	25.0	8.1	3.1	50	23
AUG 18...	1130	E2100	98	7.9	24.0	7.8	5.4	50	6
SEP 29...	1245	E1980	108	--	18.0	9.4	<.4	20	14

DATE	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
OCT 16...	31	9.1	2.0	4.0	.7	16	11	5.1	.1
MAR 25...	20	5.8	1.4	3.1	.9	--	9.3	5.0	.0
JUN 02...	32	8.9	2.4	6.0	.8	26	15	7.7	.1
JUL 14...	34	9.9	2.2	5.5	1.3	28	12	7.7	.1
AUG 18...	34	10	2.1	5.3	1.0	20	13	7.1	.1
SEP 29...	33	9.8	2.0	5.1	1.0	20	12	6.8	.1

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, ORTHOPH OSPHATE TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT 16...	3.7	55	<1.0	.300	.60	.90	--	.06	2.6
MAR 25...	3.0	44	.43	.130	1.5	1.6	2.0	<.01	4.3
JUN 02...	1.1	77	.22	.130	.49	.62	.84	.60	3.7
JUL 14...	1.2	70	.12	.130	.63	.76	.88	.09	3.6
AUG 18...	1.6	60	.15	.030	.43	.46	.61	.18	1.6
SEP 29...	1.0	57	.18	.130	.51	.64	.82	.09	3.2

01445430 PEQUEST RIVER AT TOWNSBURY, NJ

LOCATION.--Lat 40°51'06", long 74°56'02", Warren County, Hydrologic Unit 02040105, on left upstream abutment of highway bridge in Townsbury and 2.1 mi (3.4 km) upstream from Furnace Brook.

DRAINAGE AREA.--92.5 mi² (239.6 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1977 to September 1980 (discontinued).

GAGE.--Water-stage recorder. Altitude of gage is 480 ft (146 m), from topographic map.

REMARKS.--Water-discharge records good. No gage-height record Dec. 24 to Jan. 23 and Feb. 1 to Mar. 17.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,170 ft³/s (61.5 m³/s) Jan. 25, 1979, gage height, 5.30 ft (1.615 m) from floodmark; minimum, 8.3 ft³/s (0.24 m³/s) Sept. 13, 14, 1980, gage height, 1.07 ft (0.326 m).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 600 ft³/s (16.99 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Oct. 6	0145	870	24.6	3.50	1.067
Mar. 18	1130	772	21.9	3.33	1.015
Mar. 21	2145	*1210	34.3	4.01	1.222
Apr. 10	0545	629	17.8	3.09	0.942
Apr. 29	1715	676	19.1	3.17	0.966

Minimum discharge, 8.3 ft³/s (0.24 m³/s) Sept. 13, 14, gage height, 1.07 ft (0.326 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	137	88	160	124	57	60	508	487	86	40	23	9.2
2	222	84	146	118	60	56	460	351	83	35	28	8.8
3	197	313	134	112	60	54	382	288	110	34	36	9.5
4	211	301	126	102	62	54	470	248	131	34	27	9.9
5	268	215	121	98	63	54	462	219	99	32	23	13
6	607	177	114	93	63	56	407	207	80	91	23	14
7	293	160	104	90	62	60	339	197	76	49	22	14
8	232	147	100	88	62	72	300	188	73	40	20	13
9	189	138	104	84	61	82	409	172	71	37	20	11
10	228	166	90	87	60	80	584	155	90	33	19	9.9
11	280	193	86	130	59	99	486	145	79	31	18	9.1
12	241	217	88	260	61	90	408	188	71	33	19	8.8
13	217	187	97	230	58	72	346	275	62	32	18	8.6
14	182	171	254	175	59	58	359	228	57	29	17	8.7
15	162	155	261	148	58	88	448	176	53	26	18	9.2
16	147	143	188	134	56	74	390	147	50	25	19	9.3
17	134	132	159	129	55	255	325	133	46	28	17	9.4
18	126	125	152	121	58	621	282	124	46	26	16	17
19	119	119	139	137	60	443	254	119	49	24	16	17
20	114	117	135	132	62	300	234	112	44	23	16	13
21	110	111	124	120	64	590	215	124	41	23	17	13
22	107	109	123	109	70	934	198	129	38	23	15	13
23	101	107	128	102	77	710	183	111	37	31	15	12
24	103	99	185	93	87	584	170	97	37	33	15	11
25	101	91	260	94	89	648	162	90	36	28	15	11
26	95	220	228	92	87	519	155	80	34	25	14	12
27	90	397	200	83	76	423	158	74	30	24	12	11
28	96	254	180	79	68	355	334	68	30	22	11	11
29	110	201	162	74	64	386	577	65	30	24	9.8	11
30	101	189	145	70	---	394	588	62	49	30	9.8	12
31	93	---	134	62	---	402	---	69	---	26	9.7	---
TOTAL	5413	5126	4627	3570	1878	8673	10593	5128	1818	991	558.3	339.4
MEAN	175	171	149	115	64.8	280	353	165	60.6	32.0	18.0	11.3
MAX	607	397	261	260	89	934	588	487	131	91	36	17
MIN	90	84	86	62	55	54	155	62	30	22	9.7	8.6
CFSM	1.89	1.85	1.61	1.24	.70	3.03	3.82	1.78	.66	.35	.20	.12
IN.	2.18	2.06	1.86	1.44	.76	3.49	4.26	2.06	.73	.40	.22	.14

CAL YR 1979 TOTAL 72607.0 MEAN 199 MAX 1900 MIN 26 CFSM 2.15 IN 29.20
WTR YR 1980 TOTAL 48714.7 MEAN 133 MAX 934 MIN 8.6 CFSM 1.44 IN 19.59

01445500 PEQUEST RIVER AT PEQUEST, NJ

LOCATION.--Lat 40°49'43", long 74°58'45", Warren County, Hydrologic Unit 02040105, on right bank at Pequest, 100 ft (30 m) upstream from Lehigh and Hudson River Railway bridge, and 300 ft (91 m) downstream from Furnace Brook.

DRAINAGE AREA.--108 mi² (280 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1921 to current year. Monthly discharge only for October 1921, published in WSP 1302.

REVISED RECORDS.--WSP 1902: 1940(M), 1945, 1955(M), 1957, 1959(M).

GAGE.--Water-stage recorder. Concrete control since Sept. 29, 1929. Datum of gage is 398.78 ft (121.548 m) National Geodetic Vertical Datum of 1929. Prior to June 22, 1926, nonrecording gage at site 10 ft (3 m) upstream at same datum.

REMARKS.--Water-discharge records fair.

AVERAGE DISCHARGE.--59 years, 154 ft³/s (4.361 m³/s), 19.36 in/yr (492 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,130 ft³/s (60.3 m³/s) Jan. 25, 1979, gage height, 5.97 ft (1.820 m) from floodmark; minimum, 12 ft³/s (0.34 m³/s) Aug. 17-22, Dec. 10, 1965.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 650 ft³/s (18.4 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Oct. 6	0200	763	21.6	3.42	1.042
Mar. 21	2300	*1060	30.0	4.04	1.231

Minimum discharge, 25 ft³/s (0.71 m³/s) Sept. 2, 3, 11, 13, 14, 15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	158	121	197	157	74	71	473	444	126	64	47	27
2	248	119	177	153	86	79	430	359	120	59	50	26
3	224	316	165	147	77	66	372	313	145	59	60	26
4	237	315	165	136	81	73	451	282	173	58	49	29
5	292	246	163	130	81	74	433	257	135	57	45	30
6	565	212	163	121	81	75	388	245	112	117	45	30
7	326	196	210	117	82	76	338	236	105	75	42	29
8	272	184	193	116	79	84	311	230	101	64	41	28
9	232	177	172	111	79	110	401	216	97	60	40	27
10	273	207	160	115	77	103	537	200	119	56	37	27
11	314	228	154	143	76	131	451	190	107	55	36	26
12	281	249	149	301	79	113	396	235	97	62	46	26
13	258	223	180	233	74	95	355	326	88	59	40	26
14	223	209	228	187	76	70	369	279	83	55	37	25
15	203	193	190	182	75	117	436	228	78	50	38	26
16	187	181	173	170	73	95	385	198	74	48	39	26
17	174	170	187	159	70	123	339	181	71	51	35	26
18	166	162	144	155	76	555	307	171	70	49	34	34
19	157	155	138	180	79	383	285	167	72	46	34	36
20	148	153	129	175	79	291	268	161	69	45	35	30
21	142	149	146	152	85	532	252	176	65	42	35	29
22	140	145	158	137	88	849	236	181	62	43	34	28
23	134	143	160	134	96	623	223	158	59	54	33	27
24	139	136	196	124	111	508	211	142	60	56	31	26
25	137	127	315	113	120	567	203	131	59	50	31	26
26	129	239	291	111	112	466	196	118	57	46	30	27
27	122	365	245	105	99	395	199	108	55	44	30	27
28	130	271	220	104	92	348	333	100	53	42	29	26
29	149	228	199	98	80	368	502	96	52	45	29	26
30	137	207	179	83	---	373	510	92	72	51	29	26
31	127	---	168	81	---	390	---	100	---	48	28	---
TOTAL	6424	6026	5714	4430	2437	8203	10590	6320	2636	1710	1169	828
MEAN	207	201	184	143	84.0	265	353	204	87.9	55.2	37.7	27.6
MAX	565	365	315	301	120	849	537	444	173	117	60	36
MIN	122	119	129	81	70	66	196	92	52	42	28	25
CFSM	1.92	1.86	1.70	1.32	.78	2.45	3.27	1.89	.81	.51	.35	.26
IN.	2.21	2.08	1.97	1.53	.84	2.83	3.65	2.18	.91	.59	.40	.29

CAL YR 1979 TOTAL 87188 MEAN 239 MAX 2040 MIN 43 CFSM 2.21 IN 30.03
WTR YR 1980 TOTAL 56487 MEAN 154 MAX 849 MIN 25 CFSM 1.43 IN 19.46

01446000 BEAVER BROOK NEAR BELVIDERE, NJ

LOCATION.--Lat 40°50'40", long 75°02'48", Warren County, Hydrologic Unit 02040105, 2,000 ft (610 m) upstream from mouth, and 2.0 mi (3.2 km) east of Belvidere.

DRAINAGE AREA.--36.2 mi^2 (93.8 km^2).

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1923-25, 1958, 1976 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIOCHEM UNINHIB 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)	HARD-NESS (MG/L AS CACO3)
OCT										
03...	1130	76	320	7.9	17.0	9.0	2.0	2200	>2400	140
MAR										
05...	0945	--	420	8.2	2.0	13.6	--	20	8	190
APR										
22...	0945	71	390	7.9	12.5	11.4	1.0	50	13	160
JUN										
05...	1230	27	374	8.6	18.5	11.4	1.4	700	110	180
JUL										
14...	1040	7.9	430	8.4	18.0	10.5	<1.2	1300	33	190
AUG										
18...	1020	2.9	425	7.7	17.5	9.5	8.6	330	920	230
SEP										
29...	1020	1.2	425	8.0	11.0	10.2	<1.3	1700	170	220

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
OCT									
03...	36	13	7.2	2.0	120	.0	25	13	.1
MAR									
05...	44	19	8.3	1.2	160	--	36	15	.1
APR									
22...	38	16	7.9	1.0	140	--	24	12	.1
JUN									
05...	43	18	7.5	1.0	150	.2	25	10	.1
JUL									
14...	45	19	7.6	1.2	170	--	30	13	.1
AUG									
18...	53	23	7.3	1.4	180	--	33	14	.1
SEP									
29...	52	22	6.6	1.3	180	--	32	13	.1

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, ORTHOPH OSPHATE TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT									
03...	7.6	195	<1.0	.400	.35	.75	--	.16	8.9
MAR									
05...	4.4	245	1.4	.120	.21	.33	1.7	<.01	1.2
APR									
22...	3.5	212	.90	.200	.02	.22	1.1	<.03	5.8
JUN									
05...	4.9	233	.96	.180	.46	.64	1.6	.04	2.8
JUL									
14...	4.2	241	.23	.120	.23	.35	.58	.17	2.8
AUG									
18...	7.0	293	1.4	.090	.20	.29	1.7	.06	.8
SEP									
29...	5.1	250	1.0	.310	.08	.39	1.4	.09	1.7

01446000 BEAVER BROOK NEAR BELVIDERE, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	NITROGEN, NH4 + ORG. TOT IN BOT MAT (MG/KG AS N)	CARBON, INORGANIC, TOT IN BOT MAT (G/KG AS C)	CARBON, INORG + ORGANIC TOT. IN BOT MAT (G/KG AS C)	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC TOTAL IN BOTTOM MATERIAL (UG/G AS AS)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	BORON, TOTAL RECOVERABLE (UG/L AS B)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM RECOV. FM BOTTOM MATERIAL (UG/G AS CD)
OCT											
03...	1130	--	--	--	30	1	--	0	20	0	--
JUN											
05...	1230	--	--	--	0	1	--	0	40	0	--
SEP											
29...	1020	2190	2.1	13	--	--	0	--	--	--	<10

DATE	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, RECOV. FM BOTTOM MATERIAL (UG/G)	COBALT, RECOV. FM BOTTOM MATERIAL (UG/G AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, RECOV. FM BOTTOM MATERIAL (UG/G AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, RECOV. FM BOTTOM MATERIAL (UG/G AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, RECOV. FM BOTTOM MATERIAL (UG/G AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, RECOV. FM BOTTOM MATERIAL (UG/G)
OCT											
03...	20	--	--	0	--	450	--	2	--	40	--
JUN											
05...	<10	--	--	2	--	410	--	4	--	50	--
SEP											
29...	--	<10	<10	--	<10	--	4000	--	10	--	330

DATE	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MERCURY RECOV. FM BOTTOM MATERIAL (UG/G AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	NICKEL, RECOV. FM BOTTOM MATERIAL (UG/G AS NI)	SELENIUM, TOTAL (UG/L AS SE)	SELENIUM, TOTAL IN BOTTOM MATERIAL (UG/G)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, RECOV. FM BOTTOM MATERIAL (UG/G AS ZN)	PHENOLS (UG/L)	PCB, TOTAL IN BOTTOM MATERIAL (UG/KG)	PCN, TOTAL IN BOTTOM MATERIAL (UG/KG)
OCT											
03...	<.5	--	2	--	0	--	10	--	1	--	--
JUN											
05...	<.1	--	0	--	0	--	10	--	1	--	--
SEP											
29...	--	.00	--	<10	--	0	--	40	--	5	.0

DATE	ALDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	CHLORDANE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDD, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDT, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIAZINON, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIELDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ENDOSULFAN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ENDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ETHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR, TOTAL IN BOTTOM MATERIAL (UG/KG)
OCT											
03...	--	--	--	--	--	--	--	--	--	--	--
JUN											
05...	--	--	--	--	--	--	--	--	--	--	--
SEP											
29...	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0

DATE	HEPTACHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)	LINDANE TOTAL IN BOTTOM MATERIAL (UG/KG)	MALATHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	METHOXYCHLOR, TOT. IN BOTTOM MATL. (UG/KG)	METHYL PARATHION, TOT. IN BOTTOM MATL. (UG/KG)	METHYL TRITHION, TOT. IN BOTTOM MATL. (UG/KG)	MIREX, TOTAL IN BOTTOM MATERIAL (UG/KG)	PARATHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	PERTHANE IN BOTTOM MATERIL (UG/KG)	TOXAPHENE, TOTAL IN BOTTOM MATERIAL (UG/KG)	TRITHION, TOTAL IN BOTTOM MATERIAL (UG/KG)
OCT											
03...	--	--	--	--	--	--	--	--	--	--	--
JUN											
05...	--	--	--	--	--	--	--	--	--	--	--
SEP											
29...	.0	.0	.0	.0	.0	.0	.0	.0	.00	0	.0

01446400 PEQUEST RIVER AT BELVIDERE, NJ

LOCATION.--Lat 40°49'45", long 75°04'44", Warren County, Hydrologic Unit 02040105, at last highway bridge before mouth in Belvidere, and 0.3 mi (0.4 km) upstream from mouth.

DRAINAGE AREA.--158 mi^2 (409 km^2).

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1957, 1962, 1976 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIOCHEM UNINHIB 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)	HARD-NESS (MG/L AS CACO3)
OCT 03...	1300	319	350	8.1	17.0	9.4	2.0	9200	>2400	160
MAR 12...	0940	148	418	8.2	--	14.5	E1.5	130	8	180
APR 22...	1230	338	380	8.3	14.5	11.2	1.1	80	13	170
JUN 05...	1130	184	400	8.5	17.0	10.4	2.0	1100	350	180
JUL 14...	1130	76	440	8.1	18.5	10.2	<1.6	490	540	200
AUG 18...	1100	59	480	7.9	18.0	10.2	5.8	3500	1600	220
SEP 29...	1140	E38	480	8.3	12.5	12.5	<1.0	1700	240	220

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
OCT 03...	38	16	9.0	2.1	130	--	30	15	.1
MAR 12...	41	19	12	1.4	150	--	31	18	.1
APR 22...	40	18	9.7	1.2	150	--	23	16	.1
JUN 05...	42	19	10	1.1	160	.2	25	11	.1
JUL 14...	45	21	9.4	1.4	190	--	26	16	.1
AUG 18...	50	24	14	1.5	190	--	29	20	.1
SEP 29...	50	24	15	1.4	180	.3	29	22	.1

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, ORTHOPH OSPHATE TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT 03...	7.7	216	<1.0	.300	.48	.78	--	.36	9.0
MAR 12...	5.0	236	1.3	.100	.92	1.0	2.3	.21	5.0
APR 22...	4.1	231	.90	.090	--	E.62	--	.03	4.1
JUN 05...	7.0	251	1.0	.160	.43	.59	1.6	.07	4.0
JUL 14...	5.4	267	.25	.120	.48	.60	.85	.08	3.3
AUG 18...	7.5	295	1.2	.030	.58	.61	1.8	.15	1.8
SEP 29...	2.3	267	.89	.270	.35	.62	1.5	.06	4.2

01446400 PEQUEST RIVER AT BELVIDERE, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BERYL- LIUM, TOTAL RECOV- ERABLE (UG/L AS BE)	BORON, TOTAL RECOV- ERABLE (UG/L AS B)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU)
JUN								
05...	1130	10	2	0	50	0	<10	2
SEP								
29...	1140	10	1	0	0	0	20	2

DATE	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI)	SELE- NIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	PHENOLS (UG/L)
JUN								
05...	380	3	50	<.1	0	0	10	0
SEP								
29...	130	0	20	<.1	1	0	10	1

01446500 DELAWARE RIVER AT BELVIDERE, NJ

LOCATION.--Lat 40°49'36", long 75°05'02", Warren County, Hydrologic Unit 02040105, on left bank at Belvidere, 800 ft (240 m) downstream from Pequest River, and at channel mile 197.7 (318.1 km).

DRAINAGE AREA.--4,535 mi^2 (11,746 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1922 to current year.

REVISED RECORDS.--WSP 781: 1933(M). WSP 951: 1940-41, Drainage area. WSP 1432: 1923, 1924(M).

GAGE.--Water-stage recorder. Datum of gage is 226.43 ft (69.016 m) National Geodetic Vertical Datum of 1929. Prior to Jan. 1, 1929, nonrecording gage at site 200 ft (61 m) upstream at same datum.

REMARKS.--Water-discharge records good. Diurnal fluctuations at medium and low flow caused by powerplants on tributary streams. Flow regulated by Lake Wallenpaupack, and by Pepacton, Cannonsville, Swinging Bridge, Toronto, Cliff Lake, and Neversink Reservoirs (see Delaware River Basin, reservoirs in) and smaller reservoirs. Diversion from Pepacton, Cannonsville, and Neversink Reservoirs (see Delaware River Basin, diversions).

AVERAGE DISCHARGE.--58 years, 7,960 ft^3/s (225.4 m^3/s), unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 273,000 ft^3/s (7,730 m^3/s) Aug. 19, 1955, gage height, 30.21 ft (9.208 m) from high-water mark in gage house, from rating curve extended above 170,000 ft^3/s (4,810 m^3/s) on basis of flood-routing study; minimum, 609 ft^3/s (17.2 m^3/s) Sept. 28, 29, 1943, gage height, 2.11 ft (0.643 m).

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Oct. 10, 1903, reached a stage of 28.6 ft (8.72 m), from floodmark, discharge, 220,000 ft^3/s (6,230 m^3/s) from rating curve extended above 170,000 ft^3/s (4,810 m^3/s).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 78,000 ft^3/s (2,210 m^3/s) Mar. 22, gage height, 15.76 ft (4.804 m); minimum, 1,540 ft^3/s (43.6 m^3/s) Sept. 28, gage height 2.94 ft (0.896 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4660	4530	13900	6930	2180	2120	24300	22600	3010	4060	2380	2250
2	11000	4350	11800	5960	2180	2730	23400	19300	2970	4510	2280	2220
3	13600	7120	10500	6070	2810	2320	21700	17100	3520	3590	2650	2130
4	13500	15100	10600	6070	2330	2360	20400	14300	3950	3170	2720	2070
5	14000	14500	10200	5410	2370	2940	22100	12300	3510	2770	3060	2000
6	19800	11800	9660	4480	2560	2570	20200	12300	2880	3200	3350	2120
7	20800	10500	9020	3450	2580	2490	17500	11700	2960	2780	3120	2020
8	16300	9300	8190	3860	2560	2470	15300	10300	3170	3080	2870	2150
9	14400	8450	6670	4210	2500	3110	15800	9290	3160	3160	2740	1920
10	13200	7820	5850	3950	2650	4530	27200	8450	3130	2890	2520	1880
11	13200	7550	6180	4280	2430	5650	33800	7080	3350	2840	1940	1880
12	11900	7560	6410	6700	2450	4490	26400	7070	3460	3030	2070	1860
13	11200	7270	6590	5330	2330	4030	21600	8860	3020	2580	2190	1990
14	9800	6910	6930	5140	2430	3060	19900	7960	2650	2480	2140	2120
15	8470	6280	6910	5490	2410	4130	22900	7290	2420	2270	2180	2020
16	8340	5760	5920	5330	2480	3110	26000	6570	2480	2610	2270	2000
17	8350	5440	5350	4790	2300	2850	22400	5650	2510	2680	2230	2120
18	8080	5370	5190	5110	2120	8220	19400	4930	2710	2750	2090	2520
19	7590	4930	5310	5250	2260	16500	17100	4650	2570	2450	1850	2470
20	6770	4700	5200	4470	2310	16400	14300	4970	2560	2150	2030	2480
21	5580	4660	4870	3850	2640	18200	13000	5000	2510	1920	1710	2320
22	4660	4690	5610	3610	2810	60000	12700	5190	2410	2130	1820	2070
23	5030	4360	5300	3980	2540	55600	11500	4650	2590	3060	1870	2080
24	6220	4090	4740	4010	3000	31900	10500	4180	2480	2660	1970	2200
25	6690	4130	6500	3210	2700	26100	9840	3750	2360	2560	1960	1980
26	7160	5890	10100	3450	2410	24900	9170	3270	2380	2360	1940	2020
27	6750	23700	11600	3130	2190	20100	7680	2930	2450	2250	2180	2060
28	4990	34600	9990	3280	2170	17100	9910	2840	2310	2060	2220	2000
29	4630	21500	8880	3010	2410	17600	18700	2670	2330	1920	2230	1940
30	4710	16400	7390	2670	---	21900	25000	2460	2870	2110	2210	1920
31	4800	---	6620	2140	---	23600	---	2590	---	1980	2200	---
TOTAL	296180	279260	237980	138620	71110	413080	559700	242250	84680	84060	70990	62810
MEAN	9554	9309	7677	4472	2452	13330	18660	7815	2823	2712	2290	2094
MAX	20800	34600	13900	6930	3000	60000	33800	22600	3950	4510	3350	2520
MIN	4630	4090	4740	2140	2120	2120	7680	2460	2310	1920	1710	1860

CAL YR 1979 TOTAL 3706170 MEAN 10150 MAX 68300 MIN 1950
WTR YR 1980 TOTAL 2540720 MEAN 6942 MAX 60000 MIN 1710

01447000 DELAWARE RIVER AT NORTHAMPTON STREET AT EASTON, PA

LOCATION.--Lat 40°41'30", long 75°12'15", Northampton County, Hydrologic Unit 02040105, at bridge on Northampton Street in Easton, 600 ft (182 m) upstream from Lehigh River, and 0.2 mi (0.3 km) downstream from U.S. Route 22 toll bridge in Easton.

DRAINAGE AREA.--4,717 mi² (12,217 km²).

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1976 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH FIELD (UNITS)	TEMPERATURE, WATER (DEG C)	OXYGEN, DISSOLVED (MG/L)	OXYGEN DEMAND, BIOCHEM UNINHIB 5 DAY (MG/L)	COLIFORM, FECAL, EC BROTH (MPN)	STREPTOCOCCI FECAL (MPN)	HARDNESS (MG/L AS CACO3)
OCT 17...	0945	--	--	10.0	10.4	1.0	20	21	43
MAR 26...	0945	82	--	3.5	12.4	1.6	130	23	27
JUN 03...	0945	168	7.9	23.0	7.9	3.3	20	49	54
JUL 15...	0945	152	7.7	26.0	7.9	5.0	330	70	54
AUG 19...	0930	--	7.6	23.0	7.3	<.7	40	7	73
SEP 30...	1015	117	7.4	19.0	10.0	E.3	<20	13	43

DATE	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	ALKALINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)
OCT 17...	12	3.1	4.2	.8	21	--	15	5.9	.1
MAR 26...	7.5	2.0	3.9	.9	16	--	11	5.5	.1
JUN 03...	14	4.5	7.8	.9	38	.0	21	8.6	.1
JUL 15...	15	4.1	6.1	1.2	42	--	18	9.3	.1
AUG 19...	18	6.8	8.4	1.6	56	--	22	11	.1
SEP 30...	12	3.1	6.2	1.1	29	--	14	7.9	.1

DATE	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, ORTHOPHOSPHATE TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT 17...	4.0	75	<1.0	.200	.34	.54	--	.08	5.0
MAR 26...	3.4	58	.55	.210	1.3	1.5	2.0	.14	4.6
JUN 03...	1.5	--	.66	.210	.34	.55	1.2	.05	4.5
JUL 15...	1.6	96	.56	.260	.84	1.1	1.7	.03	2.6
AUG 19...	4.7	119	.55	<.030	--	.63	1.2	.12	.9
SEP 30...	1.1	73	.43	.240	.59	.83	1.3	.06	7.4

DATE	TIME	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	BORON, TOTAL RECOVERABLE (UG/L AS B)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)
JUN 03...	0945	20	1	0	30	0	<10	4

01447000 DELAWARE RIVER AT NORTHAMPTON STREET AT EASTON, PA--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	PHENOLS (UG/L)
JUN								
03...	100	25	20	<.1	6	0	20	3

01453000 LEHIGH RIVER AT BETHLEHEM, PA

LOCATION.--Lat 40°36'55", long 75°22'45", Lehigh County, Hydrologic Unit 02040106, on left bank 110 ft (34 m) upstream from New Street Bridge at Bethlehem, and 1,800 ft (549 m) upstream from Monocacy Creek. Records include flow of Monocacy Creek.

DRAINAGE AREA.--1,279 mi² (3,313 km²) includes that of Monocacy Creek. At site used prior to October 1, 1928, 1,229 mi² (3.183 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--September 1902 to February 1905, April 1909 to current year. Monthly discharge only for some periods, published in WSP 1302. Published as "at South Bethlehem" prior to October 1913.

REVISED RECORD.--WSP 261: 1903-05. WSP 321: 1910-11. WSP 1051: Drainage area. WSP 1141: 1929-34(M). WSP 1302: 1914(M), 1916(M), 1918, 1921, 1927-28. WSP 1432: 1903, 1919(M), 1920-21, 1929, 1933.

GAGE.--Water-stage recorder. Datum of gage is 210.94 ft (64.295 m) National Geodetic Vertical Datum of 1929. Prior to October 1928, nonrecording gage at New Street Bridge 120 ft (37 m) downstream at same datum. Oct. 1, 1928, to Sept. 30, 1962, water-stage recorder at site 4,250 ft (1.295 m) downstream at datum 2.49 ft (0.759 m) lower. Oct. 1, 1963 to Dec. 14, 1975, water-stage recorder at site 40 ft (12 m) downstream at same datum.

REMARKS.--Water-discharge records good. Flow regulated by Wild Creek Reservoir (sta 01449790) since February 1971. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--73 years (water years 1903-04, 1910-80), 2,347 ft³/s (66.47 m³/s), 24.92 in/yr (633 mm/yr), adjusted for diversion 1902-04, 1909-42 and, for recirculated water, October 1, 1959 to September 30, 1962.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 92,000 ft³/s (2,610 m³/s) May 23, 1942, gage height, about 25.9 ft (7.89 m), from floodmark, present site and datum, from rating curve extended above 48,000 ft³/s (1,360 m³/s); minimum, 125 ft³/s (3.54 m³/s) June 28, 1965, gage height, 0.94 ft (0.287 m).

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Feb. 28, 1902, reached a stage of 24.9 ft (7.59 m), from floodmark, present site and datum, discharge, about 88,000 ft³/s (2,490 m³/s).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 21,200 ft³/s (600 m³/s), Mar. 22, gage height, 9.30 ft (2.835 m); minimum, 289 ft³/s (8.18 m³/s) Sept. 24, gage height, 1.09 ft (0.332 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5460	1870	4270	2920	1030	813	5890	4460	1880	840	574	643
2	8570	1870	3740	2780	1130	870	6510	3930	1710	813	547	629
3	7700	3640	3500	2590	1100	813	6030	3560	1880	784	615	699
4	8490	4350	3090	2420	1190	944	6150	3230	2480	798	657	519
5	8230	4200	2940	2300	1160	989	5230	3000	1930	856	699	615
6	8490	3600	2880	2170	1160	1020	4590	2630	1690	1190	547	657
7	7400	3110	2840	2140	1170	959	4120	2370	1660	1130	560	643
8	6780	2880	2650	2120	1140	1050	3620	2300	1660	1020	519	615
9	6180	2580	2500	1960	1130	1420	4410	2260	1540	841	454	615
10	6080	2770	2410	1860	1110	1340	8280	2240	1760	798	467	629
11	5010	2940	2160	2050	1080	1490	8310	2170	1560	727	480	587
12	4220	2780	2050	3050	1110	1410	5580	2500	1440	713	519	587
13	3740	2610	2370	2670	1020	1310	4500	4270	1340	685	587	671
14	3280	2670	2920	2540	1030	1130	4570	3480	1250	770	506	629
15	2940	2520	2480	2410	1050	1340	5600	3030	1200	770	493	827
16	2750	2260	2310	2330	1100	1490	5530	2670	1190	784	506	574
17	2410	2190	2460	2070	959	1610	5630	2440	1140	813	454	480
18	2580	2140	2210	2020	974	6530	4550	2370	1050	755	428	713
19	2260	2050	2210	2100	1020	7200	3810	2390	1020	671	415	574
20	2230	1870	2140	2050	1030	5720	3740	2440	944	657	441	403
21	2170	1800	2030	1980	1100	8650	3360	2560	944	657	428	344
22	1970	1750	2050	1830	1200	15900	3050	2590	1030	601	428	355
23	1930	1710	2030	1740	1310	9040	2900	2300	900	870	428	333
24	2630	1680	2170	1620	1760	9100	2730	2100	885	944	428	322
25	2670	1710	4200	1640	1470	10800	2280	2000	784	727	415	391
26	2460	3340	6030	1640	1280	9260	2210	1880	741	601	643	493
27	2120	8130	4970	1510	989	7270	2330	1760	727	574	798	428
28	2140	7650	4200	1590	1030	5010	3950	1640	713	587	727	403
29	2280	5930	3480	1410	989	5120	5910	1510	741	643	493	403
30	2070	5170	3300	1290	---	4810	5580	1470	1000	685	547	506
31	1950	---	3130	1230	---	4830	---	1490	---	601	643	---
TOTAL	129190	93770	91720	64030	32821	129238	140950	79040	38789	23905	16446	16287
MEAN	4167	3126	2959	2065	1132	4169	4698	2550	1293	771	531	543
MAX	8570	8130	6030	3050	1760	15900	8310	4460	2480	1190	798	827
MIN	1930	1680	2030	1230	959	813	2210	1470	713	574	415	322
CFSM	3.26	2.44	2.31	1.62	.89	3.26	3.67	1.99	1.01	.60	.42	.43
IN.	3.76	2.73	2.67	1.86	.95	3.76	4.10	2.30	1.13	.70	.48	.47

CAL YR 1979 TOTAL 1260328 MEAN 3453 MAX 32900 MIN 467 CFSM 2.70 IN 36.66
WTR YR 1980 TOTAL 856186 MEAN 2339 MAX 15900 MIN 322 CFSM 1.83 IN 24.90

01454720 LEHIGH RIVER AT EASTON, PA

LOCATION.--Lat 40°41'12", long 75°12'32", Northampton County, Hydrologic Unit 02040106, at Third Street Bridge, Easton, U.S. Highway 611.

DRAINAGE AREA.--1,360 mi² (3,530 km²).

WATER-QUALITY DATA

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1963 to current year.
pH: October 1972 to September 1974, October 1975 to current year.
WATER TEMPERATURES: October 1961 to current year.
DISSOLVED OXYGEN: June 1966 to current year.

REMARKS.--Not operated October 1, 1979, through April 22, 1980.

EXTREMS FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 581 micromhos Aug. 19, 1963; minimum, 70 micromhos Nov. 14, 1970.
pH: Maximum, 8.4 Aug. 8, 1980; minimum, 6.0 Mar. 16, 1978.
WATER TEMPERATURES: Maximum, 30.5°C July 29, 1970, and July 21, 1980; minimum, freezing point on many days during winter months.
DISSOLVED OXYGEN: Maximum, 15.5 mg/L Jan. 11, 1978; minimum, 0.0 mg/L Aug. 4, 1966.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1												
2												
3												
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29												
30												
31												
MONTH												

01454720 LEHIGH RIVER AT EASTON, PA--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1							---	---	---	13.0	12.5	12.5
2							---	---	---	14.5	13.5	14.5
3							---	---	---	15.5	14.5	15.5
4							---	---	---	16.5	15.0	16.0
5							---	---	---	17.5	16.0	16.5
6							---	---	---	18.0	16.5	17.0
7							---	---	---	18.5	17.0	18.0
8							---	---	---	18.5	17.0	17.5
9							---	---	---	17.0	16.0	16.5
10							---	---	---	16.0	15.0	15.5
11							---	---	---	16.0	15.0	15.5
12							---	---	---	15.5	15.0	15.5
13							---	---	---	17.0	15.5	16.0
14							---	---	---	17.5	17.0	17.5
15							---	---	---	17.5	17.0	17.5
16							---	---	---	17.5	16.5	17.0
17							---	---	---	17.5	17.0	17.0
18							---	---	---	17.5	17.0	17.0
19							---	---	---	17.5	16.5	17.0
20							---	---	---	18.0	17.5	17.5
21							---	---	---	18.5	17.5	18.0
22							---	---	---	18.5	17.5	18.0
23							15.0	14.5	15.0	20.0	18.5	19.5
24							15.5	14.5	15.0	21.0	20.0	20.5
25							15.5	15.0	15.5	21.5	20.5	21.0
26							15.5	15.0	15.0	21.0	20.0	20.5
27							15.0	13.5	14.0	20.0	19.5	19.5
28							13.5	12.5	13.0	20.0	19.0	19.5
29							12.5	12.0	12.0	20.5	19.5	19.5
30							12.5	12.0	12.0	20.0	19.5	20.0
31							---	---	---	20.0	19.5	19.5
MONTH							15.5	12.0	14.0	21.5	12.5	17.5

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	21.0	19.5	20.5	25.0	23.0	24.0	28.5	27.0	28.0	28.0	27.0	27.5
2	21.5	21.0	21.0	25.0	23.5	24.0	28.5	27.5	28.0	28.5	27.0	28.0
3	22.0	21.0	21.5	24.5	23.5	24.0	29.0	27.5	28.0	29.0	27.5	28.5
4	21.5	20.5	21.0	25.0	23.5	24.0	29.0	27.5	28.5	28.5	27.0	27.5
5	21.0	20.0	20.5	25.0	23.5	24.5	29.5	28.0	28.5	28.0	26.5	27.0
6	20.5	20.0	20.5	25.0	23.5	24.0	29.5	28.0	29.0	27.0	26.0	26.5
7	21.5	20.0	20.5	24.5	23.0	23.5	29.5	28.0	29.0	27.0	25.5	26.0
8	22.0	21.0	21.5	25.0	23.0	24.0	29.5	28.5	29.0	26.0	25.0	25.5
9	21.0	19.0	20.0	26.5	24.0	25.0	29.5	28.5	29.0	25.5	24.5	25.0
10	19.0	18.0	18.5	27.0	25.0	26.0	29.5	28.5	29.0	25.5	24.5	25.0
11	18.0	17.0	17.5	27.5	26.0	26.5	28.5	27.5	28.0	25.0	24.0	24.5
12	19.0	17.5	18.0	27.5	26.0	27.0	28.0	27.0	27.5	25.0	23.5	24.0
13	20.0	18.5	19.0	27.5	26.0	26.5	27.5	26.5	27.0	25.0	23.5	24.5
14	21.0	19.5	20.5	28.0	25.5	26.5	27.0	26.0	26.5	25.0	24.0	24.5
15	22.5	20.5	21.5	27.5	26.0	27.0	27.0	26.0	26.5	24.5	23.5	24.0
16	22.5	21.5	22.0	28.0	26.5	27.5	26.5	25.5	25.5	23.5	22.5	23.0
17	22.5	21.5	22.0	28.0	27.0	27.5	25.5	24.5	25.0	23.0	22.0	22.5
18	22.5	21.0	21.5	28.5	26.5	27.5	25.5	24.0	24.5	23.5	22.5	23.0
19	22.0	20.5	21.5	29.0	27.0	28.0	25.0	24.0	24.5	23.5	22.0	22.5
20	22.0	20.5	21.0	29.5	27.5	28.5	26.0	24.0	25.0	23.5	22.0	23.0
21	21.5	19.5	20.5	30.5	28.5	29.5	25.5	25.0	25.0	24.5	23.0	23.5
22	22.5	20.0	21.5	30.0	29.0	29.5	25.5	24.5	25.0	25.5	23.5	24.5
23	23.5	21.0	22.5	30.0	28.5	29.0	26.0	24.5	25.0	26.0	25.0	25.5
24	24.5	21.5	23.0	28.5	27.0	28.0	26.5	25.0	25.5	25.5	24.0	24.5
25	25.5	23.0	24.0	28.5	26.5	27.5	27.0	25.5	26.0	25.0	23.0	23.5
26	26.0	24.0	25.0	28.5	27.0	27.5	27.5	26.0	26.5	23.0	22.5	23.0
27	26.0	24.5	25.5	28.5	27.5	28.0	28.0	26.5	27.0	22.5	20.5	21.0
28	26.0	24.5	25.5	28.5	27.5	28.0	28.0	26.5	27.5	21.5	20.0	20.5
29	25.5	24.5	25.0	28.5	27.0	27.5	28.0	26.5	27.0	21.5	19.5	20.0
30	24.5	23.5	24.0	28.0	27.0	27.5	28.0	26.5	27.5	21.5	20.0	20.5
31	---	---	---	28.0	26.5	27.5	28.0	27.0	27.5	---	---	---
MONTH	26.0	17.0	21.5	30.5	23.0	26.5	29.5	24.0	27.0	29.0	19.5	24.5

01454720 LEHIGH RIVER AT EASTON, PA--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1												
2												
3												
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25												
26												
27												
28												
29												
30												
31												
MONTH												

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1							---	---	---	154	143	148
2							---	---	---	161	154	158
3							---	---	---	169	158	164
4							---	---	---	175	168	172
5							---	---	---	176	172	175
6							---	---	---	191	175	181
7							---	---	---	211	192	207
8							---	---	---	224	201	216
9							---	---	---	247	224	233
10							---	---	---	226	213	221
11							---	---	---	224	214	220
12							---	---	---	219	202	213
13							---	---	---	211	164	186
14							---	---	---	179	173	176
15							---	---	---	188	179	183
16							---	---	---	200	189	193
17							---	---	---	213	201	210
18							---	---	---	217	208	213
19							---	---	---	212	204	209
20							---	---	---	221	207	214
21							---	---	---	220	210	216
22							---	---	---	220	206	213
23							175	170	172	220	209	217
24							176	172	174	232	219	227
25							195	176	187	230	223	226
26							206	198	203	226	222	224
27							201	185	197	234	224	229
28							193	169	179	265	233	246
29							169	143	152	274	251	261
30							149	141	145	286	270	279
31							---	---	---	288	278	284
MONTH							206	141	176	288	143	210

01454720 LEHIGH RIVER AT EASTON, PA--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	313	249	275	330	319	325	398	382	388	402	351	377
2	252	239	243	362	329	348	414	392	400	351	333	338
3	273	252	262	354	338	348	410	401	405	345	333	338
4	269	219	242	350	337	344	407	384	395	362	335	347
5	223	217	219	349	321	340	385	360	371	370	354	359
6	250	223	240	338	304	324	382	358	370	402	368	382
7	257	244	252	317	287	299	390	375	381	397	378	389
8	254	237	247	309	270	297	409	389	396	376	355	361
9	258	239	248	325	310	313	409	398	402	353	330	338
10	264	256	261	350	326	340	409	391	399	366	328	345
11	268	256	262	361	343	352	409	390	404	373	357	365
12	280	263	272	373	343	361	400	382	388	387	354	366
13	291	276	284	377	358	370	414	380	391	387	367	374
14	299	283	290	369	350	361	418	406	411	377	363	370
15	297	283	291	349	336	344	413	390	400	360	316	342
16	296	277	286	369	337	358	421	401	409	323	302	311
17	305	283	290	367	351	361	421	403	410	350	306	320
18	321	299	305	361	348	355	417	393	402	378	344	364
19	330	315	322	375	351	364	402	384	392	373	346	360
20	331	316	325	372	360	366	411	388	393	385	360	371
21	342	329	336	368	356	362	431	412	422	392	379	384
22	345	328	338	363	354	358	436	415	425	407	389	397
23	335	306	318	399	357	377	433	423	428	414	406	410
24	334	311	319	394	369	383	443	433	438	425	414	420
25	348	334	342	370	343	356	452	418	438	463	422	448
26	362	347	356	379	345	366	419	394	405	482	448	467
27	376	359	369	393	372	383	431	396	410	491	472	481
28	390	366	380	389	380	384	420	359	393	484	452	469
29	374	333	367	385	371	378	373	353	365	475	442	461
30	361	321	346	396	373	383	370	350	357	459	411	440
31	---	---	---	405	374	396	404	370	383	---	---	---
MONTH	390	217	296	405	270	355	452	350	399	491	302	383

OXYGEN, DISSOLVED (DO), MG/L, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1												
2												
3												
4												
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22												
23												
24												
25												
26												
27												
28												
29												
30												
31												
MONTH												

01454720 LEHIGH RIVER AT EASTON, PA--Continued

OXYGEN, DISSOLVED (DO), MG/L, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1							---	---	---	12.0	11.2	11.6
2							---	---	---	12.4	11.2	11.8
3							---	---	---	11.6	11.0	11.3
4							---	---	---	11.6	10.6	11.0
5							---	---	---	11.0	10.1	10.5
6							---	---	---	10.2	9.2	9.7
7							---	---	---	9.5	8.7	9.1
8							---	---	---	10.9	8.1	9.5
9							---	---	---	11.8	10.4	11.1
10							---	---	---	12.5	11.2	11.8
11							---	---	---	12.0	11.3	11.6
12							---	---	---	11.8	10.9	11.2
13							---	---	---	11.1	9.9	10.5
14							---	---	---	9.9	9.6	9.8
15							---	---	---	9.8	8.9	9.2
16							---	---	---	9.4	8.7	9.1
17							---	---	---	9.9	8.8	9.3
18							---	---	---	9.3	8.9	9.1
19							---	---	---	9.7	8.9	9.2
20							---	---	---	9.6	8.7	9.1
21							---	---	---	9.1	8.2	8.5
22							---	---	---	9.1	8.3	8.7
23							11.4	9.4	10.2	9.0	8.3	8.6
24							11.9	8.7	10.4	8.6	7.7	8.2
25							10.9	9.4	10.1	9.1	7.7	8.5
26							10.7	9.0	9.9	9.5	8.1	8.7
27							10.3	9.9	10.2	10.1	8.5	9.2
28							10.2	10.0	10.1	10.5	9.2	9.8
29							11.8	9.2	10.6	10.7	9.2	9.8
30							11.9	11.2	11.6	10.1	9.1	9.5
31							---	---	---	10.8	9.0	9.8
MONTH							11.9	8.7	10.4	12.5	7.7	9.8

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	9.9	8.8	9.5	10.0	7.4	8.5	6.1	3.6	4.7	---	---	---
2	9.4	8.2	8.9	9.3	7.1	8.1	---	---	---	---	---	---
3	8.7	8.2	8.5	7.8	6.9	7.3	---	---	---	---	---	---
4	8.7	8.4	8.5	8.6	6.3	7.3	---	---	---	8.3	4.8	6.1
5	8.9	8.4	8.7	8.2	6.1	7.1	---	---	---	7.6	4.9	6.1
6	8.7	7.8	8.4	6.7	6.1	6.4	---	---	---	---	---	---
7	8.3	7.6	8.1	6.7	5.6	5.9	---	---	---	---	---	---
8	8.0	7.1	7.6	7.5	6.9	7.2	---	---	---	---	---	---
9	9.7	7.3	8.4	8.1	6.5	7.2	---	---	---	---	---	---
10	10.3	9.6	10.0	7.8	6.2	6.9	---	---	---	8.1	5.5	6.7
11	11.3	10.1	10.7	8.0	6.0	6.8	8.2	6.9	---	8.0	5.4	6.6
12	11.4	10.4	10.9	8.0	5.6	6.7	8.0	4.9	6.2	8.3	5.4	6.7
13	11.1	10.0	10.5	8.6	5.6	6.7	8.4	5.0	6.5	8.1	5.6	6.8
14	10.6	9.5	9.9	9.3	5.7	7.1	8.1	5.3	6.6	---	---	---
15	9.7	8.2	9.0	8.7	6.0	7.2	7.3	5.0	6.1	---	---	---
16	9.2	7.9	8.4	8.3	5.8	6.8	7.6	5.4	6.4	---	---	---
17	9.2	7.8	8.3	7.2	5.3	6.1	8.3	5.6	6.7	---	---	---
18	9.1	8.2	8.5	7.7	5.4	6.3	8.1	6.0	7.0	7.2	6.5	---
19	9.1	8.0	8.4	7.8	5.2	6.2	8.5	5.8	6.8	7.2	5.4	6.2
20	8.6	7.7	8.2	8.4	5.1	6.5	9.0	5.9	7.2	7.7	5.8	6.6
21	8.9	7.8	8.2	7.8	4.6	6.0	8.9	5.8	7.2	7.7	5.7	6.6
22	8.5	7.6	8.1	9.1	4.4	6.3	8.2	5.3	6.6	7.5	5.5	6.4
23	9.5	7.5	8.2	7.5	5.0	6.1	8.0	5.6	6.5	7.9	5.1	6.4
24	8.7	7.0	7.8	7.9	5.0	6.3	8.2	5.5	6.6	---	---	---
25	9.6	6.7	7.9	8.3	5.4	6.7	8.3	5.4	6.6	---	---	---
26	9.4	6.1	7.5	7.7	5.0	6.2	8.9	5.3	6.8	7.6	5.8	---
27	9.1	6.3	7.5	8.0	4.6	6.0	8.6	5.4	6.9	7.8	5.6	6.6
28	8.5	5.7	6.8	8.1	4.6	6.0	8.7	5.4	6.9	8.0	6.0	6.9
29	7.7	5.4	6.4	7.5	4.2	5.6	7.8	4.8	6.1	8.0	6.2	6.9
30	8.9	5.3	6.6	7.2	5.2	6.2	---	---	---	8.9	5.9	7.1
31	---	---	---	7.5	4.0	5.6	---	---	---	---	---	-
MONTH	11.4	5.3	8.5	10.0	4.0	6.6	9.0	3.6	6.6	8.9	4.8	6.6

LEHIGH RIVER BASIN

01454720 LEHIGH RIVER AT EASTON, PA--Continued

PH (STANDARD UNITS), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1												
2												
3												
4												
5												
6												
7												
8												
9												
10												
11												
12												
13												
14												
15												
16												
17												
18												
19												
20												
21												
22												
23												
24												
25												
26												
27												
28												
29												
30												
31												
MONTH												

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1							---	---	---	7.3	7.2	7.3
2							---	---	---	7.4	7.3	7.4
3							---	---	---	7.4	7.3	7.3
4							---	---	---	7.5	7.3	7.4
5							---	---	---	7.5	7.4	7.4
6							---	---	---	7.5	7.4	7.4
7							---	---	---	7.4	7.3	7.4
8							---	---	---	7.4	7.3	7.4
9							---	---	---	7.5	7.4	7.5
10							---	---	---	7.6	7.5	7.5
11							---	---	---	7.6	7.4	7.5
12							---	---	---	7.5	7.3	7.4
13							---	---	---	7.3	7.2	7.3
14							---	---	---	7.3	7.2	7.2
15							---	---	---	7.3	7.2	7.3
16							---	---	---	7.3	7.2	7.3
17							---	---	---	7.5	7.3	7.4
18							---	---	---	7.6	7.4	7.5
19							---	---	---	7.4	7.4	7.4
20							---	---	---	7.5	7.4	7.4
21							---	---	---	7.4	7.3	7.3
22							---	---	---	7.4	7.3	7.3
23							7.6	7.5	7.5	7.4	7.3	7.4
24							7.6	7.5	7.5	7.4	7.3	7.4
25							7.6	7.5	7.5	7.5	7.4	7.4
26							7.6	7.6	7.6	7.5	7.5	7.5
27							7.7	7.5	7.6	7.6	7.4	7.5
28							7.5	7.5	7.5	7.6	7.5	7.6
29							7.5	7.2	7.4	7.6	7.5	7.5
30							7.3	7.3	7.3	7.5	7.4	7.5
31							---	---	---	7.5	7.1	7.4
MONTH							7.7	7.2	7.5	7.6	7.1	7.4

01454720 LEHIGH RIVER AT EASTON, PA--Continued

PH (STANDARD UNITS), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	7.4	7.0	7.4	7.6	7.3	7.4	7.9	7.4	7.6	8.0	7.4	7.6
2	7.4	7.2	7.3	7.6	7.3	7.4	7.8	7.4	7.6	7.9	7.3	7.6
3	7.3	7.2	7.2	7.4	7.3	7.3	7.9	7.3	7.6	8.0	7.3	7.6
4	7.3	7.2	7.2	7.5	7.2	7.3	8.0	7.4	7.6	7.9	7.3	7.5
5	7.2	7.2	7.2	7.5	7.2	7.3	8.1	7.4	7.7	7.8	7.3	7.5
6	7.2	7.2	7.2	7.3	7.2	7.2	8.2	7.4	7.7	7.6	7.3	7.4
7	7.2	7.2	7.2	7.6	7.2	7.3	8.3	7.4	7.8	7.7	7.3	7.4
8	7.2	7.1	7.2	7.6	7.3	7.4	8.4	7.5	7.9	7.7	7.3	7.5
9	7.4	7.0	7.2	7.7	7.4	7.5	8.3	7.4	7.8	7.8	7.3	7.5
10	7.4	7.4	7.4	7.7	7.4	7.5	8.0	7.4	7.7	7.7	7.3	7.5
11	7.5	7.4	7.4	7.8	7.4	7.5	8.1	7.4	7.7	7.8	7.3	7.5
12	7.5	7.4	7.4	7.7	7.4	7.5	8.0	7.4	7.7	7.8	7.3	7.5
13	7.5	7.4	7.5	8.0	7.4	7.6	8.1	7.4	7.7	7.8	7.3	7.5
14	7.5	7.4	7.4	8.2	7.4	7.8	8.0	7.5	7.7	7.6	7.3	7.4
15	7.5	7.3	7.4	8.1	7.5	7.8	7.9	7.4	7.5	7.5	7.3	7.3
16	7.5	7.2	7.4	7.8	7.4	7.6	7.7	7.4	7.5	7.4	7.2	7.3
17	7.6	7.4	7.5	7.6	7.3	7.4	7.9	7.4	7.6	7.5	7.0	7.3
18	7.5	7.4	7.4	7.6	7.3	7.4	7.9	7.5	7.7	7.5	7.3	7.3
19	7.5	7.3	7.4	7.7	7.3	7.4	7.8	7.4	7.6	7.4	7.1	7.3
20	7.4	7.3	7.3	8.0	7.3	7.5	8.0	7.4	7.6	7.5	7.2	7.3
21	7.4	7.2	7.3	7.9	7.3	7.6	8.0	7.4	7.7	7.5	7.2	7.3
22	7.4	7.2	7.3	8.1	7.3	7.6	7.9	7.4	7.6	7.5	7.2	7.3
23	7.8	7.2	7.4	8.0	7.4	7.6	7.7	7.4	7.5	7.7	7.2	7.4
24	7.8	7.4	7.6	7.8	7.4	7.6	7.8	7.4	7.5	7.7	7.2	7.4
25	8.0	7.3	7.6	8.0	7.4	7.7	7.9	7.4	7.6	7.7	7.2	7.4
26	8.1	7.3	7.6	7.8	7.4	7.6	8.1	7.5	7.7	7.6	7.3	7.4
27	8.0	7.4	7.7	8.0	7.3	7.6	8.0	7.5	7.7	7.6	7.3	7.4
28	7.9	7.3	7.6	8.1	7.4	7.7	8.2	7.4	7.7	7.7	7.3	7.5
29	7.8	7.4	7.6	7.9	7.4	7.6	7.9	7.3	7.5	7.8	7.4	7.5
30	7.7	7.3	7.4	7.6	7.4	7.5	8.0	7.3	7.6	7.7	7.3	7.5
31	---	---	---	7.9	7.3	7.5	7.9	7.3	7.6	---	---	---
MONTH	8.1	7.0	7.4	8.2	7.2	7.5	8.4	7.3	7.7	8.0	7.0	7.4

01455100 LOPATCONG CREEK AT PHILLIPSBURG, NJ

LOCATION.--Lat 40°40'38", long 75°10'13", Warren County, Hydrologic Unit 02040105, at bridge on Lock Street in Phillipsburg, and 0.9 mi (1.4 km) upstream from mouth.

DRAINAGE AREA.--14.2 mi² (36.8 km²).

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1959-62, January 1979 to current year.

COOPERATION.--Selected field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIOCHEM UNINHIB 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)	HARD-NESS (MG/L AS CACO3)
MAR										
05...	0930	8.0	422	7.9	6.0	10.8	<.9	>24000	70	170
MAY										
07...	1115	14	362	8.1	14.5	9.7	<.5	3500	350	160
JUN										
03...	1045	13	352	7.2	15.0	9.2	1.0	3500	920	140
JUL										
15...	1030	9.2	410	7.7	14.0	9.9	<.1	1300	280	200
AUG										
19...	1130	5.1	458	7.7	12.5	9.6	E1.9	490	540	220
SEP										
30...	1015	5.0	440	8.0	12.0	9.8	E.8	330	>2400	220

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
MAR									
05...	38	19	10	1.6	130	--	36	17	.1
MAY									
07...	36	17	7.7	1.7	120	--	34	11	.1
JUN									
03...	30	16	7.3	1.4	120	--	31	9.8	.1
JUL									
15...	44	23	7.9	2.0	160	--	30	11	.1
AUG									
19...	48	25	6.7	1.9	170	--	34	12	.1
SEP									
30...	47	25	7.3	2.1	160	.0	29	12	.1

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, ORTHOPH OSPHATE TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
MAR									
05...	12	233	3.7	.120	.33	.45	4.2	<.01	2.2
MAY									
07...	12	239	3.3	.160	.39	.55	3.8	.17	2.0
JUN									
03...	12	236	3.3	.380	.25	.63	3.9	.10	2.4
JUL									
15...	12	283	4.8	.100	.02	.12	4.9	.09	.6
AUG									
19...	14	300	4.6	<.030	--	.12	4.7	.06	.2
SEP									
30...	14	265	4.6	.180	.26	.44	5.0	.06	2.6

DATE	TIME	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE)	BORON, TOTAL RECOV-ERABLE (UG/L AS B)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)
SEP								
30...	1015	20	0	0	10	0	10	2

01455100 LOPATCONG CREEK AT PHILLIPSBURG, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	PHENOLS (UG/L)
SEP								
30...	140	1	20	<.1	2	0	20	3

01455200 POHATCONG CREEK AT NEW VILLAGE, NJ

LOCATION.--Lat 40°42'57", long 75°04'20", Warren County, Hydrologic Unit 02040105, at bridge on Edison Road, 0.4 mi (0.6 km) southeast of New Village, and 4.3 mi (6.9 km) upstream from Merrill Creek.

DRAINAGE AREA.--33.4 mi² (86.5 km²).

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1959, 1962 and January 1979 to current year.

COOPERATION.--Selected field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIOCHEM UNINHIB 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)	HARD-NESS (MG/L AS CACO3)
MAR									
12...	1115	180	7.5	2.0	14.6	E1.6	<20	5	61
MAY									
01...	1045	167	7.5	13.0	10.7	--	230	110	61
JUN									
03...	1000	176	7.1	18.0	8.1	2.8	>24000	>2400	61
JUL									
15...	0930	230	7.5	21.0	8.4	<.1	9200	540	92
AUG									
19...	1045	253	7.3	19.0	8.9	3.9	16000	130	98

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)
MAR									
12...	14	6.3	8.4	1.3	34	20	11	.1	13
MAY									
01...	15	5.7	8.0	1.5	37	16	8.4	.1	12
JUN									
03...	14	6.3	7.7	1.3	41	18	8.9	.1	13
JUL									
15...	21	9.5	9.7	1.8	69	18	12	.1	15
AUG									
19...	23	9.9	10	2.3	76	19	13	.1	16

DATE	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, ORTHOPH OSPHATE TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
MAR								
12...	115	1.6	.430	.23	.66	2.3	2.8	11
MAY								
01...	101	1.2	.230	--	--	--	.38	3.4
JUN								
03...	134	1.6	--	--	.53	2.1	.52	4.7
JUL								
15...	137	2.2	.140	.60	.74	2.9	.89	3.0
AUG								
19...	162	2.4	<.030	--	.63	3.0	1.1	1.6

01455300 POHATCONG CREEK AT CARPENTERSVILLE, NJ

LOCATION.--Lat 40°37'30", long 75°11'10", Warren County, Hydrologic Unit 02040105, at bridge on Carpentersville-Riegelsville Road in Carpentersville, and 2,000 ft (610 m) upstream from mouth.

DRAINAGE AREA.--57.1 mi^2 (147.9 km^2).

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1959-62, 1976 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIOCHEM UNINHIB 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)	HARD-NESS (MG/L AS CACO3)
OCT										
02...	1030	123	184	7.9	15.5	9.1	--	>24000	>2400	73
MAR										
05...	1100	--	320	8.3	3.0	14.2	<1.1	20	130	130
APR										
28...	1215	149	215	7.5	10.0	10.2	2.4	9200	>2400	85
JUN										
03...	1230	64	270	7.4	18.0	9.5	1.4	3500	350	110
JUL										
15...	1130	--	327	7.8	19.0	9.5	<.1	3500	540	160
AUG										
19...	1230	4.5	371	7.9	17.0	9.6	3.2	940	920	--

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
OCT									
02...	17	7.3	5.9	2.7	52	.0	17	7.5	.1
MAR									
05...	28	14	7.8	1.6	100	--	28	10	.1
APR									
28...	20	8.6	7.3	2.0	66	--	24	7.9	.1
JUN									
03...	26	12	6.3	1.5	84	.4	24	8.5	.1
JUL									
15...	34	17	7.4	2.2	130	--	26	9.7	.1
AUG									
19...	--	--	--	--	--	--	--	--	--

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, ORTHOPH OSPHATE TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT									
02...	11	116	<1.0	.200	.40	.60	--	1.1	6.6
MAR									
05...	8.3	179	2.5	.120	.24	.36	2.9	.07	[illegible]
APR									
28...	11	149	2.0	.170	.49	.66	2.7	.49	5.2
JUN									
03...	12	188	2.2	E.190	--	.29	2.5	.37	5.6
JUL									
15...	12	215	1.0	.090	.44	.53	1.5	.46	2.0
AUG									
19...	--	--	2.6	<.030	--	.27	2.9	.31	.5

01455300 POHATCONG CREEK AT CARPENTERSVILLE, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	BORON, TOTAL RECOVERABLE (UG/L AS B)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)
OCT								
02...	1030	50	1	10	30	0	10	8
JUN								
03...	1230	0	1	0	30	0	<10	2

DATE	IRON, TOTAL RECOVERABLE (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	PHENOLS (UG/L)
OCT								
02...	1800	10	70	<.5	3	0	10	1
JUN								
03...	570	4	40	.9	1	0	10	--

01455500 MUSCONETCONG RIVER AT OUTLET OF LAKE HOPATCONG, NJ

LOCATION.--Lat 40°55'00", long 74°39'55", Morris County, Hydrologic Unit 02040105, just upstream of bridge on Warren County Route 43 and 300 ft (91 m) downstream from Lake Hopatcong dam in Landing.

DRAINAGE AREA.--25.6 mi^2 (66.3 km^2).

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1962, 1976 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIOCHEM UNINHIB 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)	HARD-NESS (MG/L AS CACO3)
OCT 09...	1040	110	202	8.2	14.5	9.5	2.0	<20	2	45
FEB 27...	0930	13	243	7.4	4.0	12.8	--	<20	<2	54
APR 21...	1015	95	228	7.9	12.0	10.6	1.2	<20	2	49
JUN 04...	1140	40	203	7.5	20.0	8.5	1.3	20	48	46
JUL 15...	1115	80	230	7.6	24.0	8.5	<1.1	<20	<2	52
AUG 13...	0930	9.6	197	--	19.0	8.4	<.4	80	27	50
SEP 30...	1250	9.6	215	7.4	17.0	14.0	E.2	<20	14	50

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
OCT 09...	12	3.7	17	.9	17	.0	10	38	.1
FEB 27...	14	4.5	20	1.1	33	--	19	39	.1
APR 21...	13	3.9	17	1.1	23	--	16	34	.1
JUN 04...	12	3.9	18	.7	20	.1	14	31	.1
JUL 15...	14	4.2	18	1.0	32	--	13	32	.1
AUG 13...	13	4.2	18	.9	33	--	12	32	.1
SEP 30...	13	4.3	18	1.0	29	--	12	34	.1

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, ORTHOPH OSPHATE TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT 09...	3.0	111	<1.0	.300	.27	.57	--	<.01	5.5
FEB 27...	.6	138	.35	E.060	--	.39	.74	<.01	4.7
APR 21...	.3	126	.26	.200	.35	.55	.81	.03	4.5
JUN 04...	.7	113	.15	.090	.43	.52	.67	.08	4.3
JUL 15...	1.0	128	.06	.100	.52	.62	.68	.12	3.5
AUG 13...	3.0	133	<.05	.080	.52	.60	--	.09	3.7
SEP 30...	2.8	116	<.05	.120	.74	.86	--	.09	5.6

01455500 MUSCONETCONG RIVER AT OUTLET OF LAKE HOPATCONG, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BERYL- LIUM, TOTAL RECOV- ERABLE (UG/L AS BE)	BORON, TOTAL RECOV- ERABLE (UG/L AS B)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU)
OCT								
09...	1040	50	1	0	30	0	10	3
JUN								
04...	1140	0	1	0	30	0	10	1

DATE	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI)	SELE- NIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	PHENOLS (UG/L)
OCT								
09...	60	2	10	<.5	1	0	10	0
JUN								
04...	160	2	50	.2	1	0	0	2

01455801 MUSCONETCONG RIVER AT LOCKWOOD, NJ

LOCATION.--Lat 40°55'10", long 74°44'07", Sussex County, Hydrologic Unit 02040105, at bridge in Lockwood, at boundary between Sussex County and Morris County, 0.2 mi (0.4 km) southeast of Cage Hill, 0.4 mi (0.7 km) south of Jefferson Lake, and 0.9 mi (1.4 km) downstream from Lubbers Run.

DRAINAGE AREA.--60.5 mi² (156.7 km²).

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1976 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIOCHEM UNINHIB 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)	HARD-NESS (MG/L AS CACO3)
OCT 09...	1245	216	230	8.0	14.0	9.6	2.0	20	1600	65
FEB 28...	0900	--	332	7.8	.5	12.7	E1.4	50	2	95
APR 21...	1300	222	216	7.9	15.5	10.8	2.3	<20	24	59
JUN 04...	1040	96	257	7.4	19.0	8.4	2.3	490	350	72
JUL 15...	1100	22	370	7.4	20.0	7.4	E1.3	230	70	120
AUG 13...	1045	22	349	7.6	15.0	9.3	<.1	110	40	120
SEP 30...	1140	25	350	6.9	15.0	9.0	E.1	170	170	100

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
OCT 09...	17	5.4	19	1.1	37	.0	11	39	.1
FEB 28...	24	8.5	20	1.4	65	--	22	39	.1
APR 21...	15	5.2	16	1.1	32	--	18	30	.1
JUN 04...	18	6.5	16	1.0	46	--	15	31	.1
JUL 15...	29	11	20	1.9	84	--	17	39	.1
AUG 13...	29	11	22	2.0	94	--	18	41	.2
SEP 30...	24	10	23	1.8	68	--	14	42	.2

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, ORTHOPH OSPHATE TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT 09...	5.3	131	<1.0	.340	.29	.63	--	.17	3.8
FEB 28...	5.8	184	.55	.820	.58	1.4	2.0	.51	3.6
APR 21...	2.8	128	.26	.190	.41	.60	.86	.13	4.4
JUN 04...	5.6	134	.44	.140	.57	.71	1.2	.17	5.2
JUL 15...	8.6	204	1.4	.270	.61	.88	2.3	1.3	4.5
AUG 13...	11	235	1.2	.160	.63	.79	2.0	.98	3.5
SEP 30...	6.6	195	1.7	.330	.67	1.0	2.7	1.1	6.5

01455801 MUSCONETCONG RIVER AT LOCKWOOD, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	NITROGEN, NH4 + ORG. TOT IN BOT MAT (MG/KG AS N)	CARBON, INORGANIC, TOT IN BOT MAT (G/KG AS C)	CARBON, INORG + ORGANIC TOT. IN BOT MAT (G/KG AS C)	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC TOTAL IN BOTTOM MATERIAL (UG/G AS AS)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	BORON, TOTAL RECOVERABLE (UG/L AS B)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM RECOV. FM BOTTOM MATERIAL (UG/G AS CD)
OCT 09...	1245	--	--	--	40	1	0	0	40	0	<10
SEP 30...	1140	1700	.3	16	--	--	0	--	--	--	<10

DATE	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, RECOV. FM BOTTOM MATERIAL (UG/G)	COBALT, RECOV. FM BOTTOM MATERIAL (UG/G AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, RECOV. FM BOTTOM MATERIAL (UG/G AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, RECOV. FM BOTTOM MATERIAL (UG/G AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, RECOV. FM BOTTOM MATERIAL (UG/G AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, RECOV. FM BOTTOM MATERIAL (UG/G)
OCT 09...	10	<10	--	2	<10	210	7900	3	<10	30	370
SEP 30...	--	20	<10	--	40	--	8500	--	270	--	300

DATE	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MERCURY RECOV. FM BOTTOM MATERIAL (UG/G AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	NICKEL, RECOV. FM BOTTOM MATERIAL (UG/G AS NI)	SELENIUM, TOTAL (UG/L AS SE)	SELENIUM, TOTAL IN BOTTOM MATERIAL (UG/G)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, RECOV. FM BOTTOM MATERIAL (UG/G AS ZN)	PHENOLS (UG/L)	PCB, TOTAL IN BOTTOM MATERIAL (UG/KG)	PCN, TOTAL IN BOTTOM MATERIAL (UG/KG)
OCT 09...	<.5	.00	1	--	0	0	20	40	0	1	.0
SEP 30...	--	.00	--	<10	--	0	--	193	--	71	.0

DATE	ALDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	CHLORDANE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDD, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDT, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIAZINON, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIELDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ENDOSULFAN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ENDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ETHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR, TOTAL IN BOTTOM MATERIAL (UG/KG)
OCT 09...	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0
SEP 30...	.0	15	6.0	6.2	11	.0	.4	.0	.0	.0	.0

DATE	HEPTACHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)	LINDANE TOTAL IN BOTTOM MATERIAL (UG/KG)	MALATHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	METHOXYCHLOR, TOT. IN BOTTOM MATL. (UG/KG)	METHYL PARATHION, TOT. IN BOTTOM MATL. (UG/KG)	METHYL TRITHION, TOT. IN BOTTOM MATL. (UG/KG)	MIREX, TOTAL IN BOTTOM MATERIAL (UG/KG)	PARATHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	PERTHANE IN BOTTOM MATERIL (UG/KG)	TOXAPHENE, TOTAL IN BOTTOM MATERIAL (UG/KG)	TRITHION, TOTAL IN BOTTOM MATERIAL (UG/KG)
OCT 09...	.0	.0	.0	.0	.0	.0	.0	.0	.00	0	.0
SEP 30...	.0	.0	.0	.0	.0	.0	.0	.0	.00	0	.0

01456200 MUSCONETCONG RIVER AT BEATYESTOWN, NJ

LOCATION.--Lat 40°48'48", long 74°50'32", Warren County, Hydrologic Unit 02040105, at bridge at Beatyestown, 1.6 mi (2.6 km) upstream of Hanes Brook, 2.1 mi (3.4 km) northeast of Stephensburg, and 3.5 mi (5.7 km) northeast of Scrappy Corner.

DRAINAGE AREA.--90.7 mi² (234.9 km²).

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1976 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIOCHEM UNINHIB 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)	HARD-NESS (MG/L AS CACO3)
OCT 11...	1030	380	230	7.6	10.0	10.2	1.0	80	230	79
MAR 06...	1000	91	340	7.8	3.0	12.4	<.1	20	2	120
MAY 08...	1145	285	239	8.1	16.0	9.8	<1.3	700	33	87
JUN 04...	0930	200	279	7.5	18.0	8.9	1.6	490	350	99
JUL 15...	0940	53	380	7.7	19.5	8.5	<.1	170	79	150
AUG 13...	1215	--	390	8.0	15.0	9.3	<.1	790	49	150
SEP 30...	0940	E22	420	7.6	14.0	8.8	E.7	50	140	160

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
OCT 11...	19	7.6	17	1.2	53	.0	15	27	.1
MAR 06...	27	12	17	1.4	95	--	22	31	.1
MAY 08...	20	9.0	17	1.0	55	--	17	24	.1
JUN 04...	23	10	14	1.3	72	--	16	24	.1
JUL 15...	34	15	15	1.4	120	--	17	29	.1
AUG 13...	35	16	15	1.8	120	--	20	28	.1
SEP 30...	36	16	19	2.1	120	.0	16	33	.1

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, ORTHOPH OSPHATE TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT 11...	8.0	134	<1.0	1.320	.30	1.6	--	.27	2.7
MAR 06...	5.0	191	.88	.410	.59	1.1	1.9	.63	2.9
MAY 08...	5.6	136	.49	.170	.61	.78	1.3	.43	4.9
JUN 04...	7.3	163	.85	.120	.56	.68	1.5	.32	3.9
JUL 15...	8.6	226	1.2	.250	.49	.74	1.9	.89	11
AUG 13...	10	241	1.2	.090	.56	.65	1.8	.92	--
SEP 30...	9.0	228	1.3	.590	.81	1.4	2.7	1.3	4.8

01456200 MUSCONETCONG RIVER AT BEATYESTOWN, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC TOTAL IN BOTTOM MATERIAL (UG/G AS AS)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	BORON, TOTAL RECOVERABLE (UG/L AS B)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM RECOV. FM BOTTOM MATERIAL (UG/G AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, RECOV. FM BOTTOM MATERIAL (UG/G)
OCT										
11...	1030	40	2	0	0	40	0	<10	20	<10
SEP										
30...	0940	20	1	--	0	50	0	--	20	--

DATE	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, RECOV. FM BOTTOM MATERIAL (UG/G AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, RECOV. FM BOTTOM MATERIAL (UG/G AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, RECOV. FM BOTTOM MATERIAL (UG/G AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, RECOV. FM BOTTOM MATERIAL (UG/G)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MERCURY RECOV. FM BOTTOM MATERIAL (UG/G AS HG)
OCT										
11...	4	<10	300	7500	2	10	20	330	.2	.00
SEP										
30...	4	--	160	--	1	--	20	--	.1	--

DATE	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	SELENIUM, TOTAL IN BOTTOM MATERIAL (UG/G)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, RECOV. FM BOTTOM MATERIAL (UG/G AS ZN)	PHENOLS (UG/L)	PCB, TOTAL IN BOTTOM MATERIAL (UG/KG)	PCN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ALDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	CHLORDANE, TOTAL IN BOTTOM MATERIAL (UG/KG)
OCT										
11...	99	0	0	30	40	1	8	.0	.0	5
SEP										
30...	2	0	--	20	--	--	--	--	--	--

DATE	DDD, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDT, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIAZINON, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIELDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ENDOSULFAN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ENDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ETHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)
OCT										
11...	.2	.9	.0	.4	.0	.0	.0	.0	.0	.0
SEP										
30...	--	--	--	--	--	--	--	--	--	--

DATE	LINDANE TOTAL IN BOTTOM MATERIAL (UG/KG)	MALATHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	METHOXYCHLOR, TOT. IN BOTTOM MATL. (UG/KG)	METHYL PARATHION, TOT. IN BOTTOM MATL. (UG/KG)	METHYL TRITHION, TOT. IN BOTTOM MATL. (UG/KG)	MIREX, TOTAL IN BOTTOM MATERIAL (UG/KG)	PARATHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	PERTHANE IN BOTTOM MATERIL (UG/KG)	TOXAPHENE, TOTAL IN BOTTOM MATERIAL (UG/KG)	TRITHION, TOTAL IN BOTTOM MATERIAL (UG/KG)
OCT										
11...	.0	.0	.0	.0	.0	.0	.0	.00	0	.0
SEP										
30...	--	--	--	--	--	--	--	--	--	--

01457000 MUSCONETCONG RIVER NEAR BLOOMSBURY, NJ

LOCATION.--Lat 40°40'20", long 75°03'40", Warren County, Hydrologic Unit 02040105, on right bank just downstream from highway bridge, 1.5 mi (2.4 km) upstream from Bloomsbury, and 9.5 mi (15.3 km) upstream from mouth.

DRAINAGE AREA.--143 mi^2 (370 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1903 to March 1907, July 1921 to current year.

REVISED RECORDS.--WSP 521: Drainage area. WSP 1051: 1944-45. WSP 1382: 1904-06, 1922, 1923-29(M), 1931(M), 1933-34(M), 1936(M), 1940, 1942(M), 1944-45(M), 1951-52(M).

GAGE.--Water-stage recorder. Concrete control since Sept. 29, 1932. Datum of gage is 274.83 ft (83.768 m) National Geodetic Vertical Datum of 1929. July 1903 to Mar. 31, 1907, nonrecording gage at bridge 15 ft (4.6 m) upstream at different datum. July 26 to Sept. 12, 1921, nonrecording gage at bridge at present datum.

REMARKS.--Water-discharge records good. Flow regulated by Lake Hopatcong (see Delaware River Basin, reservoirs in). Diurnal fluctuation caused by small powerplants above station.

AVERAGE DISCHARGE.--62 years (water years 1904-06, 1922-80), 234 ft^3/s (6.627 m^3/s), unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,200 ft^3/s (204 m^3/s) Jan. 25, 1903, gage height, 8.50 ft (2.591 m) from floodmark, from rating curve extended above 1,800 ft^3/s (51.0 m^3/s) on basis of slope-area measurement at gage height 6.95 ft (2.118 m); minimum, 8.1 ft^3/s (0.23 m^3/s) Aug. 2, 1955; minimum daily 27 ft^3/s (0.76 m^3/s) Sept. 8, 1966.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,000 ft^3/s (28.3 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Oct. 5	2230	1090	30.9	3.72	1.134	Apr. 10	0700	1020	28.9	3.60	1.097
Mar. 21	2215	*1930	54.7	4.89	1.490						

Minimum discharge, 51 ft^3/s (1.44 m^3/s) Sept. 15, gage height, 1.18 ft (0.360 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	323	175	462	256	154	118	681	689	232	140	88	61
2	422	200	440	251	167	125	671	626	214	118	99	62
3	434	597	415	245	157	114	624	557	226	109	121	62
4	439	596	400	228	137	118	709	504	268	105	115	61
5	531	497	397	197	136	119	681	463	229	108	110	60
6	606	444	394	179	133	122	615	425	198	217	148	61
7	486	417	468	175	132	121	567	391	184	170	102	62
8	430	398	408	172	131	127	533	386	186	126	92	61
9	386	380	350	166	132	148	717	367	191	110	85	60
10	443	424	307	157	131	137	978	339	211	103	80	59
11	477	435	245	209	130	182	874	320	193	104	78	57
12	452	469	226	487	129	162	776	378	175	117	87	56
13	428	435	256	361	126	142	693	549	162	97	79	55
14	392	428	298	282	126	151	692	441	153	93	77	55
15	359	403	265	272	126	155	774	373	147	90	82	57
16	326	409	248	283	136	143	682	335	141	89	78	58
17	288	401	262	287	131	174	608	306	134	95	75	61
18	238	396	240	306	127	620	555	291	128	96	72	79
19	220	386	227	337	131	454	510	290	124	92	72	81
20	208	379	225	316	130	346	474	281	126	86	71	68
21	204	374	214	295	135	863	437	301	118	86	70	66
22	203	373	224	283	147	1270	400	291	114	89	70	68
23	199	363	244	277	167	938	374	264	113	101	69	63
24	200	355	274	253	166	735	346	245	110	101	67	61
25	196	356	367	234	158	821	329	235	108	95	66	61
26	186	546	383	208	146	681	315	219	104	89	65	63
27	176	727	331	193	136	574	317	203	103	86	64	59
28	189	583	299	191	133	502	501	193	100	83	63	58
29	205	501	285	182	124	521	721	181	101	105	62	58
30	192	475	277	161	---	515	759	168	166	113	63	59
31	181	---	266	151	---	592	---	167	---	92	61	---
TOTAL	10019	12922	9697	7594	4014	11790	17913	10778	4759	3305	2531	1852
MEAN	323	431	313	245	138	380	597	348	159	107	81.6	61.7
MAX	606	727	468	487	167	1270	978	689	268	217	148	81
MIN	176	175	214	151	124	114	315	167	100	83	61	55

CAL YR 1979 TOTAL 141432 MEAN 387 MAX 3000 MIN 82
WTR YR 1980 TOTAL 97174 MEAN 266 MAX 1270 MIN 55

01457400 MUSCONETCONG RIVER AT RIEGELSVILLE, NJ

LOCATION.--Lat 40°35'32", long 75°11'20", Warren County, Hydrologic Unit 02040105, at bridge on State Highway 13 in Riegelsville, 0.2 mi (0.3 km) north of Mount Joy, and 0.2 mi (0.3 km) upstream from mouth.

DRAINAGE AREA.--156 mi² (404 km²).

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1962, 1976 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH FIELD (UNITS)	TEMPERATURE, WATER (DEG C)	OXYGEN, DISSOLVED (MG/L)	OXYGEN DEMAND, BIOCHEM UNINHIB 5 DAY (MG/L)	COLIFORM, FECAL, EC BROTH (MPN)	STREPTOCOCCI FECAL (MPN)	HARDNESS (MG/L AS CACO3)
OCT 02...	1220	210	7.8	16.0	9.6	--	16000	>2400	80
MAR 06...	1145	360	8.0	4.5	12.8	<.1	50	13	130
APR 02...	1200	255	7.5	7.0	12.5	E1.5	110	23	79
JUN 03...	1315	301	7.2	20.0	8.0	1.9	330	170	120
JUL 15...	1300	340	8.3	22.5	9.3	<.1	790	540	150
AUG 19...	1215	336	8.3	19.0	8.1	E1.9	130	240	--
SEP 30...	1300	365	8.2	15.0	9.8	E.3	230	130	160

DATE	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	ALKALINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)
OCT 02...	19	7.9	9.2	1.7	54	--	15	15	.1
MAR 06...	29	15	12	1.4	100	--	24	22	.1
APR 02...	18	8.2	14	1.2	58	--	18	26	.1
JUN 03...	25	13	11	1.2	90	.1	20	17	.1
JUL 15...	33	16	8.9	1.6	120	--	19	17	.1
AUG 19...	--	--	--	--	--	--	--	--	--
SEP 30...	36	18	10	1.7	130	.0	19	19	.1

DATE	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, ORTHOPHOSPHATE TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT 02...	8.7	128	<1.0	.200	.25	.45	--	.62	5.6
MAR 06...	4.3	191	1.9	.120	1.3	1.4	3.2	.12	3.8
APR 02...	7.7	151	1.2	.030	.63	.66	1.9	.20	2.3
JUN 03...	8.4	--	1.8	.300	2.7	3.0	4.8	.18	3.9
JUL 15...	8.1	224	2.2	.130	.50	.63	2.8	.25	2.2
AUG 19...	--	--	2.2	<.030	--	1.0	3.2	.21	1.1
SEP 30...	7.9	207	2.3	.160	.54	.70	3.0	.21	2.8

01457400 MUSCONETCONG RIVER AT RIEGELSVILLE, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BERYL- LIUM, TOTAL RECOV- ERABLE (UG/L AS BE)	BORON, TOTAL RECOV- ERABLE (UG/L AS B)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU)
JUN								
03...	1315	70	1	0	30	1	10	9
SEP								
30...	1300	10	1	0	10	0	10	2

DATE	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI)	SELE- NIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	PHENOLS (UG/L)
JUN								
03...	4100	6	270	<.1	10	0	30	0
SEP								
30...	270	3	30	.2	3	0	10	6

01458100 HAKIHOKAKE CREEK AT MILFORD, NJ

LOCATION.--Lat 40°34'06", long 75°05'44", Hunterdon County, Hydrologic Unit 02040105, at bridge on Bridge Street at Milford, and 4,000 ft (1,220 m) upstream from mouth.

DRAINAGE AREA.--17.2 mi² (44.5 km²).

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1959-62, 1976 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIOCHEM UNINHIB 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)
OCT 02...	1345	--	188	7.6	15.5	9.8	--	1800	>2400
FEB 13...	0915	--	246	7.9	.0	14.4	--	210	7
APR 28...	1030	71	165	8.3	9.5	10.4	2.3	1300	1600
JUN 04...	0930	20	208	8.0	17.0	8.0	--	1300	>2400
JUL 21...	1000	--	315	8.3	24.0	5.3	E2.8	1300	>2400
AUG 20...	0920	80	265	--	18.5	9.3	E1.1	9200	>2400

DATE	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
OCT 02...	71	19	5.6	7.4	1.7	44	23	9.2	.1
FEB 13...	91	23	8.2	6.8	1.1	60	24	8.8	.1
APR 28...	58	15	4.9	8.8	1.7	44	22	10	.1
JUN 04...	72	18	6.6	7.3	1.3	49	22	9.4	.1
JUL 21...	100	25	10	7.1	1.4	81	23	7.8	.1
AUG 20...	110	26	11	7.7	2.3	81	27	9.6	.2

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, ORTHOPH OSPHATE TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT 02...	14	123	1.5	.200	.01	.21	1.7	.11	2.2
FEB 13...	15	135	2.0	.050	.00	.05	2.0	.05	.7
APR 28...	12	125	1.2	.160	.56	.72	1.9	.31	6.8
JUN 04...	14	130	.95	.080	.47	.55	1.5	.16	1.5
JUL 21...	14	187	1.4	.060	.61	.67	2.1	.31	1.7
AUG 20...	14	166	1.5	.900	1.1	2.0	3.5	.39	--

01458400 HARIHOKAKE CREEK NEAR FRENCHTOWN, NJ

LOCATION.--Lat 40°32'53", long 75°04'09", Hunterdon County, Hydrologic Unit 02040105, at bridge on Frenchtown-Milford Road, 1,600 ft (490 m) upstream from mouth, and 1.5 mi (2.4 km) north of Frenchtown.

DRAINAGE AREA.--9.75 mi² (25.25 km²).

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1959-62, 1976 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIOCHEM UNINHIB 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)
OCT									
11...	1330	--	152	7.2	10.0	11.2	1.0	3500	790
FEB									
13...	1100	--	150	8.3	.0	13.7	--	330	5
APR									
28...	0915	19	112	7.4	10.0	10.2	2.9	3500	>2400
JUN									
04...	1100	5.4	134	8.1	18.0	9.1	--	5400	>2400
JUL									
21...	1050	2.0	--	7.4	25.0	3.3	4.7	460	920
AUG									
20...	1000	2.0	148	6.7	19.5	9.3	E1.8	5400	>2400

DATE	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
OCT									
11...	54	16	3.5	5.8	1.8	28	22	5.9	.1
FEB									
13...	53	16	3.1	5.0	1.0	30	17	5.4	.1
APR									
28...	41	12	2.6	4.6	1.8	25	16	5.0	.1
JUN									
04...	47	14	2.9	4.8	1.3	30	14	5.3	.1
JUL									
21...	55	16	3.6	5.9	1.9	49	13	5.9	.1
AUG									
20...	55	16	3.7	5.5	2.8	50	13	5.2	.2

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, ORTHOPH OSPHATE TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT									
11...	12	99	2.7	.500	.31	.81	3.5	.17	--
FEB									
13...	9.4	72	1.7	.030	.75	.78	2.5	.02	--
APR									
28...	7.5	90	1.4	.490	.50	.99	2.4	.20	6.4
JUN									
04...	9.0	75	.82	.070	.41	.48	1.3	.13	3.7
JUL									
21...	6.3	104	.20	.070	.61	.68	.88	.28	3.5
AUG									
20...	7.4	86	.53	.040	.68	.72	1.2	.46	2.2

01458500 DELAWARE RIVER AT FRENCHTOWN, NJ

LOCATION.--Lat 40°31'34", long 75°03'55", Hunterdon County, Hydrologic Unit 02040105, at bridge at Frenchtown, 1,000 ft (300 m) upstream from Nishisakawick Creek, and 3.4 mi (5.5 km) southeast of Milford.

DRAINAGE AREA.--6,420 mi² (16,628 km²).

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1976 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH FIELD (UNITS)	TEMPERATURE, WATER (DEG C)	OXYGEN, DISSOLVED (MG/L)	OXYGEN DEMAND, BIOCHEM UNINHIB 5 DAY (MG/L)	COLIFORM, FECAL, EC BROTH (MPN)	STREPTOCOCCI FECAL (MPN)	HARDNESS (MG/L AS CACO3)
OCT									
17...	1230	--	--	10.5	10.2	<1.0	5400	79	56
MAR									
26...	1215	95	--	3.5	12.3	2.1	490	110	31
JUN									
04...	0945	222	7.6	21.0	7.6	3.2	5400	1600	77
JUL									
16...	0945	226	8.2	26.5	7.2	<1.2	50	110	80
AUG									
20...	0930	--	7.7	23.5	9.0	<.2	80	13	80

DATE	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	ALKALINITY (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)
OCT									
17...	15	4.4	6.0	1.1	27	19	8.8	.1	5.0
MAR									
26...	8.3	2.4	4.7	1.0	16	13	6.8	.1	3.6
JUN									
04...	20	6.6	9.1	1.6	47	27	13	.1	3.7
JUL									
16...	20	7.2	9.7	2.1	54	25	14	.1	3.0
AUG									
20...	20	7.4	11	1.8	55	27	14	.2	3.4

DATE	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, ORTHOPHOSPHATE TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT								
17...	90	<1.0	.200	.22	.42	--	.20	2.1
MAR								
26...	72	.70	.190	1.3	1.5	2.2	.15	6.2
JUN								
04...	135	1.4	.120	.80	.92	2.3	.84	4.4
JUL								
16...	146	1.2	.180	.82	1.0	2.2	.34	8.3
AUG								
20...	139	1.1	.090	.71	.80	1.9	.39	.9

01460500 DELAWARE AND RARITAN CANAL AT KINGSTON, NJ

LOCATION.--Lat 40°22'24", long 74°37'08", Middlesex County, Hydrologic Unit 02040105, on right bank at canal lock at Kingston, and 250 ft (76 m) upstream from new bridge on State Highway 27.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--March 1947 to current year.

GAGE.--Two water-stage recorders and concrete control. Datum of gage is 40.00 ft (12.192 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Water-discharge records good. The canal diverts water from the Delaware River at Raven Rock and discharges into Raritan River at New Brunswick. Some water wasted to the Millstone River 500 ft (152 m) above station. During part or all of some days in July, August, and September 1980, water was diverted into canal from Carniegie Lake at aqueduct over Millstone River 2.0 mi (3.2 km) upstream of gage.

AVERAGE DISCHARGE.--33 years, 76.6 ft³/s (2.169 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 174 ft³/s (4.93 m³/s) Apr. 6, 1957; no flow Dec. 31, 1948, Oct. 15, 1950, Oct. 25 to Nov. 1, 1950, Mar. 12, 1970.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 138 ft³/s (3.91 m³/s) Mar. 22; minimum, 50 ft³/s (1.42 m³/s) July 31.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	101	94	80	110	109	120	134	123	98	75	55	62
2	98	93	75	111	104	116	129	125	99	74	78	62
3	97	96	91	111	102	111	122	125	96	73	62	61
4	92	99	100	112	102	114	131	125	96	69	61	60
5	90	96	100	113	101	116	132	125	88	70	74	60
6	86	87	101	114	102	116	125	124	87	71	91	62
7	83	87	103	114	103	116	121	123	87	69	78	63
8	83	102	103	114	102	117	91	124	81	67	76	59
9	86	106	103	113	103	120	117	124	81	66	74	55
10	101	102	102	113	104	121	126	123	81	62	72	58
11	105	101	110	114	105	124	122	121	81	63	70	57
12	101	107	123	127	107	124	122	121	81	62	74	59
13	98	107	116	128	107	123	117	127	81	61	78	59
14	92	108	115	122	108	122	114	125	81	60	74	61
15	84	106	115	117	108	120	109	123	81	57	69	71
16	75	105	115	117	109	124	110	121	81	62	68	75
17	73	103	115	117	111	127	125	121	81	74	66	74
18	84	102	113	118	111	133	123	91	80	75	64	79
19	94	100	111	122	112	128	123	54	75	69	66	81
20	96	99	107	123	111	128	123	114	77	70	69	84
21	96	99	113	123	111	132	125	120	76	74	71	82
22	97	99	112	122	110	138	125	118	74	73	68	86
23	92	100	114	123	115	122	125	109	74	72	62	84
24	85	102	116	122	117	125	125	110	72	67	61	82
25	90	102	117	120	118	134	125	109	70	67	61	83
26	94	107	118	119	119	132	125	108	69	67	65	89
27	96	113	118	118	119	128	124	106	69	66	65	89
28	95	110	116	117	119	122	126	92	74	64	66	89
29	96	75	114	115	120	123	128	78	77	67	65	88
30	96	73	113	115	---	128	122	91	78	68	64	73
31	94	---	111	113	---	134	---	95	---	50	63	---
TOTAL	2850	2980	3360	3637	3169	3838	3666	3495	2426	2084	2130	2147
MEAN	91.9	99.3	108	117	109	124	122	113	80.9	67.2	68.7	71.6
MAX	105	113	123	128	120	138	134	127	99	75	91	89
MIN	73	73	75	110	101	111	91	54	69	50	55	55

CAL YR 1979 TOTAL 34554 MEAN 94.7 MAX 139 MIN 53
WTR YR 1980 TOTAL 35782 MEAN 97.8 MAX 138 MIN 50

01460880 LOCKATONG CREEK AT RAVEN ROCK, NJ

LOCATION.--Lat 40°24'58", long 75°01'05", Hunterdon County, Hydrologic Unit 02040105, at bridge, on Raven Rock-Rosemont Road, and 0.7 mi (1.1 km) upstream from mouth.

DRAINAGE AREA.--22.9 mi² (59.3 km²).

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1956, 1959-62, 1976 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococcci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIOCHEM UNINHIB 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)
FEB 06...	0845	--	223	7.9	.0	12.8	--	<20	7
APR 29...	0930	142	102	7.2	9.5	10.8	3.0	2400	>2400
JUN 05...	1010	5.3	168	7.4	16.0	9.8	1.8	220	79
JUL 21...	1150	1.2	205	7.7	26.0	7.6	4.6	490	426
AUG 20...	1100	1.2	174	6.7	20.0	8.0	<.5	220	1600

DATE	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
FEB 06...	63	15	6.2	9.9	1.9	28	31	11	.1
APR 29...	32	7.8	3.0	4.7	2.3	16	20	4.2	.1
JUN 05...	54	13	5.3	9.1	2.1	33	27	7.8	.1
JUL 21...	54	13	5.2	9.0	2.8	42	21	8.9	.1
AUG 20...	61	15	5.6	8.7	2.6	48	23	7.8	.2

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, ORTHOPH OSPHATE TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
FEB 06...	11	113	E4.3	.090	1.0	1.1	--	<.01	5.6
APR 29...	7.9	76	.69	.260	--	E.54	--	.33	8.5
JUN 05...	7.8	112	1.7	.090	.65	.74	2.4	.06	4.2
JUL 21...	3.7	104	.15	.090	.53	.62	.77	.31	2.4
AUG 20...	7.1	107	.45	.030	.43	.46	.91	.18	.8

01461000 DELAWARE RIVER AT LUMBERVILLE, PA

LOCATION.--Lat 40°24'27", long 75°02'16", Bucks County, Hydrologic Unit 02040105, at pedestrian bridge at Lumberville, 1.4 mi (2.3 km) upstream of Lockatong Creek.

DRAINAGE AREA.--6,598 mi² (17,089 km²).

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1976 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH FIELD (UNITS)	TEMPERATURE, WATER (DEG C)	OXYGEN, DISSOLVED (MG/L)	OXYGEN DEMAND, BIOCHEM UNINHIB 5 DAY (MG/L)	COLIFORM, FECAL, EC BROTH (MPN)	STREPTOCOCCI FECAL (MPN)	HARDNESS (MG/L AS CACO3)
OCT 18...	0900	--	--	10.0	--	<1.0	9200	130	56
MAR 27...	0900	102	7.1	4.0	12.6	.7	230	46	33
JUN 04...	1100	215	7.2	21.0	7.4	3.4	3500	1600	78
JUL 16...	1130	219	8.3	27.0	8.1	<.2	20	34	76
AUG 20...	1115	193	8.4	23.5	8.2	<.6	80	27	80

DATE	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	ALKALINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)
OCT 18...	15	4.5	6.6	1.1	31	--	19	8.8	.1
MAR 27...	8.8	2.6	5.5	1.1	14	--	14	7.3	.1
JUN 04...	20	6.7	11	1.6	46	.2	28	13	.2
JUL 16...	19	6.9	9.3	1.8	53	--	24	12	.1
AUG 20...	20	7.3	10	1.8	56	--	26	13	.2

DATE	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, ORTHOPHOSPHATE TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT 18...	5.1	91	1.2	.200	1.1	1.3	2.5	.12	2.5
MAR 27...	3.8	70	.75	.110	.17	.28	1.0	.08	4.1
JUN 04...	3.7	138	1.6	.370	.73	1.1	2.7	.46	6.4
JUL 16...	2.8	138	.99	.110	.79	.90	1.9	.37	3.4
AUG 20...	3.2	138	1.0	.050	.58	.63	1.6	.34	1.4

DATE	TIME	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	BORON, TOTAL RECOVERABLE (UG/L AS B)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)
JUN 04...	1100	100	1	0	50	1	20	9

01461000 DELAWARE RIVER AT LUMBERVILLE, PA--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	PHENOLS (UG/L)
JUN								
04...	4700	20	220	<.1	14	0	110	1

01461300 WICKECHEOKE CREEK AT STOCKTON, NJ

LOCATION.--Lat 40°24'41", long 74°59'13", Hunterdon County, Hydrologic Unit 02040105, at bridge on State Route 29 in Stockton, 900 ft (270 m) upstream from mouth.

DRAINAGE AREA.--26.5 mi^2 (68.6 km^2).

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1959-63, 1976 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH FIELD (UNITS)	TEMPERATURE, WATER (DEG C)	OXYGEN, DISSOLVED (MG/L)	OXYGEN DEMAND, BIOCHEM UNINHIB 5 DAY (MG/L)	COLIFORM, FECAL, EC BROTH (MPN)	STREPTOCOCCI FECAL (MPN)
FEB 06...	1100	--	460	6.7	.0	14.0	--	<20	<2
APR 29...	1030	83	178	7.1	10.0	10.7	1.4	1700	>2400
JUN 04...	1245	9.2	195	7.9	21.0	6.8	--	700	130
JUL 16...	1300	--	205	9.1	26.0	9.4	<.1	1800	110
AUG 20...	1300	--	179	9.2	23.0	10.2	<.7	9200	240

DATE	HARDNESS (MG/L AS CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	ALKALINITY (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)
FEB 06...	65	15	6.6	51	1.9	26	44	64	.1
APR 29...	28	6.7	2.7	22	1.9	16	24	23	.1
JUN 04...	39	9.6	3.7	19	1.9	25	26	17	.1
JUL 16...	55	13	5.4	18	2.1	46	25	14	.1
AUG 20...	60	14	6.0	15	1.9	49	25	13	.2

DATE	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, ORTHOPHOSPHATE TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
FEB 06...	14	228	3.7	.070	.23	.30	4.0	<.01	3.0
APR 29...	8.6	118	.77	.150	.01	.16	.93	.29	6.4
JUN 04...	10	109	1.6	.080	.46	.54	2.1	.17	8.8
JUL 16...	6.5	137	1.6	.160	.47	.63	2.2	.09	2.1
AUG 20...	12	122	.90	.030	.58	.61	1.5	.15	.5

01461900 ALEXAUKEN CREEK NEAR LAMBERTVILLE, NJ

LOCATION.--Lat 40°22'51", long 74°56'54", Hunterdon County, Hydrologic Unit 02040105, at bridge on State Route 29, 0.4 mi (0.6 km) upstream from mouth, and 1.1 mi (1.8 km) north of Lambertville.

DRAINAGE AREA.--14.9 mi² (38.6 km²).

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1959-63, 1976 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIOCHEM UNINHIB 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)
MAR 12...	1300	25	208	6.8	3.0	14.8	<.9	80	33
APR 29...	1145	59	157	7.3	10.5	11.0	2.8	1100	350
JUN 04...	1230	6.8	209	7.4	20.0	9.0	1.1	1600	>2400
JUL 17...	0915	3.9	256	7.6	22.0	6.0	2.9	3500	>2400
AUG 21...	0845	--	310	6.9	19.0	8.1	E1.4	50	13

DATE	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
MAR 12...	67	16	6.6	8.0	1.4	26	33	11	.1
APR 29...	53	13	5.0	6.3	1.9	25	27	8.1	.1
JUN 04...	75	19	6.6	7.7	2.0	42	32	9.7	.1
JUL 17...	99	25	8.8	9.4	2.7	57	42	10	.1
AUG 21...	120	31	10	11	2.4	70	57	13	.2

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, ORTHOPH OSPHATE TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
MAR 12...	12	128	2.3	.120	.12	.24	2.5	.17	2.3
APR 29...	13	119	1.4	.110	.00	.11	1.5	.31	5.3
JUN 04...	12	150	2.1	.140	.59	.73	2.8	.24	5.9
JUL 17...	9.5	160	.87	.290	1.3	1.6	2.5	.40	3.4
AUG 21...	7.5	176	<.05	.060	.61	.67	--	.06	.1

01462000 DELAWARE RIVER AT LAMBERTVILLE, NJ

LOCATION.--Lat 40°21'53", long 74°56'57", Hunterdon County, Hydrologic Unit 02040105, at U.S. Route 202 bridge connecting Lambertville, NJ, and New Hope, PA, and 600 ft (183 m) upstream of Swan Creek.

DRAINAGE AREA.--6,680 mi² (17,301 km²).

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1976 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIOCHEM UNINHIB 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)	HARD-NESS (MG/L AS CACO3)
OCT 18...	1130	--	--	11.0	9.9	<1.0	540	79	56
MAR 24...	1030	87	7.7	3.5	12.3	2.1	230	33	27
JUN 05...	0915	205	7.7	20.0	7.2	2.3	490	2	70
JUL 17...	0915	206	7.7	26.0	5.6	<.9	130	170	75
AUG 21...	0915	200	8.5	24.0	7.9	<1.2	110	<2	80

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)
OCT 18...	15	4.6	6.2	1.1	29	20	8.9	.1	5.0
MAR 24...	7.2	2.2	4.5	1.1	22	12	6.2	.1	3.4
JUN 05...	18	6.1	9.9	1.4	47	25	11	.1	3.8
JUL 17...	18	7.3	11	1.9	51	23	12	.1	3.0
AUG 21...	20	7.4	10	1.7	56	27	12	.2	3.0

DATE	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, ORTHOPH OSPHATE TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT 18...	91	1.2	.200	.58	.78	2.0	.11	2.8
MAR 24...	66	.80	.190	2.5	2.7	3.5	.31	5.9
JUN 05...	141	1.4	.210	.63	.84	2.2	.20	1.4
JUL 17...	129	1.1	.630	--	--	--	.58	2.5
AUG 21...	131	1.2	.030	.62	.65	1.8	.31	1.4

01462005 SWAN CREEK AT LAMBERTVILLE, NJ

LOCATION.--Lat 40°21'51", long 74°56'41", Hunterdon County, Hydrologic Unit 02040105, at bridge in Lambertville 250 ft (76 m) upstream from Delaware-Raritan Canal, 350 ft (107 m) downstream from State Route 29, and 500 ft (152 m) upstream from mouth.

DRAINAGE AREA.--3.28 mi² (8.50 km²).

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1976 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIOCHEM UNINHIB 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)	HARD-NESS (MG/L AS CACO3)
OCT 11...	1430	26	205	7.5	10.5	11.2	<1.0	2800	1700	65
FEB 06...	1245	--	279	6.9	.0	14.4	--	50	13	85
APR 29...	1230	25	190	7.1	11.5	10.4	1.8	330	350	53
JUN 05...	0900	10	320	7.4	15.0	9.6	1.3	1400	920	92
JUL 17...	1015	9.6	284	7.4	22.0	6.4	E2.9	16000	>2400	85
AUG 21...	0915	7.7	182	7.0	20.0	6.2	<.6	3500	1600	98

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
OCT 11...	16	6.2	11	2.1	32	.0	25	13	.1
FEB 06...	21	8.0	12	1.8	47	--	38	15	.1
APR 29...	13	4.9	14	1.5	41	--	25	20	.1
JUN 05...	23	8.4	24	2.2	56	.0	30	34	.1
JUL 17...	22	7.4	20	3.0	63	--	26	26	.1
AUG 21...	25	8.6	17	2.6	81	--	31	19	.2

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, ORTHOPH OSPHATE TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT 11...	16	122	1.2	.500	.04	.54	1.7	.13	5.7
FEB 06...	18	141	1.5	.030	.57	.60	2.1	<.01	5.1
APR 29...	13	131	.55	.090	.19	.28	.83	.16	5.6
JUN 05...	16	198	.78	.160	.22	.38	1.2	.08	1.3
JUL 17...	12	167	1.0	.160	--	--	--	.37	5.3
AUG 21...	10	159	<.05	.040	.79	.83	--	.40	2.1

01462005 SWAN CREEK AT LAMBERTVILLE, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC TOTAL IN BOTTOM MATERIAL (UG/G AS AS)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	BORON, TOTAL RECOVERABLE (UG/L AS B)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM RECOV. FM BOTTOM MATERIAL (UG/G AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, RECOV. FM BOTTOM MATERIAL (UG/G)
OCT 11...	1430	70	1	0	0	60	0	<10	10	20
JUN 05...	0900	0	1	--	0	100	0	--	<10	--

DATE	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, RECOV. FM BOTTOM MATERIAL (UG/G AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, RECOV. FM BOTTOM MATERIAL (UG/G AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, RECOV. FM BOTTOM MATERIAL (UG/G AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, RECOV. FM BOTTOM MATERIAL (UG/G)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MERCURY RECOV. FM BOTTOM MATERIAL (UG/G AS HG)
OCT 11...	7	40	270	25000	3	280	10	710	.1	.00
JUN 05...	4	--	180	--	5	--	10	--	.1	--

DATE	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	SELENIUM, TOTAL IN BOTTOM MATERIAL (UG/G)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, RECOV. FM BOTTOM MATERIAL (UG/G AS ZN)	PHENOLS (UG/L)	PCB, TOTAL IN BOTTOM MATERIAL (UG/KG)	PCN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ALDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	CHLORDANE, TOTAL IN BOTTOM MATERIAL (UG/KG)
OCT 11...	10	0	0	20	310	0	6	.0	.0	15
JUN 05...	1	0	--	20	--	0	--	--	--	--

DATE	DDD, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDT, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIAZINON, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIELDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ENDOSULFAN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ENDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ETHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)
OCT 11...	2.0	.4	.0	2.1	.0	.0	.0	.0	.0	.0
JUN 05...	--	--	--	--	--	--	--	--	--	--

DATE	LINDANE TOTAL IN BOTTOM MATERIAL (UG/KG)	MALATHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	METHOXYCHLOR, TOT. IN BOTTOM MATL. (UG/KG)	METHYL PARATHION, TOT. IN BOTTOM MATL. (UG/KG)	METHYL TRITHION, TOT. IN BOTTOM MATL. (UG/KG)	MIREX, TOTAL IN BOTTOM MATERIAL (UG/KG)	PARATHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	PERTHANE IN BOTTOM MATERIL (UG/KG)	TOXAPHENE, TOTAL IN BOTTOM MATERIAL (UG/KG)	TRITHION, TOTAL IN BOTTOM MATERIAL (UG/KG)
OCT 11...	.0	.0	.0	.0	.0	.0	.0	.00	0	.0
JUN 05...	--	--	--	--	--	--	--	--	--	--

01462500 DELAWARE RIVER AT WASHINGTON CROSSING, NJ

LOCATION.--Lat 40°17'20", long 74°52'08", Mercer County, Hydrologic Unit 02040105, at bridge at Washington Crossing, 1.4 mi (2.3 km) upstream of Jacobs Creek.

DRAINAGE AREA.--6,735 mi^2 (17,444 km^2).

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1976 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH FIELD (UNITS)	TEMPERATURE, WATER (DEG C)	OXYGEN, DISSOLVED (MG/L)	OXYGEN DEMAND, BIOCHEM UNINHIB 5 DAY (MG/L)	COLIFORM, FECAL, EC BROTH (MPN)	STREPTOCOCCI FECAL (MPN)	HARDNESS (MG/L AS CACO3)
OCT 16...	1430	--	--	11.0	8.8	1.0	16000	350	56
MAR 27...	1230	104	7.1	4.5	12.5	1.2	170	23	34
JUN 05...	1045	204	7.4	21.0	7.3	2.5	490	7	70
JUL 17...	1045	208	7.4	26.0	6.4	E2.0	1300	79	80
AUG 21...	1100	220	8.5	24.0	8.3	<1.4	230	5	81

DATE	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	ALKALINITY (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)
OCT 16...	15	4.5	5.9	1.1	26	19	8.3	.1	5.0
MAR 27...	9.0	2.7	4.9	1.1	18	16	7.8	.1	3.7
JUN 05...	18	6.2	9.9	1.4	51	25	11	.1	3.8
JUL 17...	20	7.3	9.3	1.8	53	23	13	.1	3.0
AUG 21...	20	7.5	10	1.7	56	27	13	.2	2.9

DATE	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, ORTHOPHOSPHATE TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT 16...	82	<1.0	.400	.53	.93	--	.16	3.5
MAR 27...	73	.75	.160	.02	.18	.93	.02	5.9
JUN 05...	135	1.4	.160	.44	.60	2.0	.41	1.4
JUL 17...	136	1.1	.990	--	--	--	.43	3.1
AUG 21...	133	1.0	.030	.46	.49	1.5	.34	5.4

01463500 DELAWARE RIVER AT TRENTON, NJ

(National stream quality accounting network, Pesticide program, and Radiochemical program station)

LOCATION.--Lat 40°13'18", long 74°46'42", Mercer County, Hydrologic Unit 02040105, on left bank 450 ft (137 m) upstream from Calhoun Street Bridge at Trenton, 0.5 mi (0.8 km) upstream from Assunpink Creek, and at mile 134.5 (216.4 km).

DRAINAGE AREA.--6,780 mi^2 (17,560 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--February 1913 to current year. October 1912 to February 1913 monthly discharge only, published in WSP 1302. Gage-height records collected in this vicinity since 1904 are contained in reports of the National Weather Service.

REVISED RECORDS.--WSP 951: Drainage area. WSP 1302: 1913-20. WSP 1382: 1924, 1928.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929. Prior to Sept. 30, 1965, at datum 7.77 ft (2.368 m) higher. Feb. 24, 1913, to Oct. 2, 1928, nonrecording gage on downstream side of highway bridge at site 500 ft (152 m) downstream.

REMARKS.--Water-discharge records good. Diurnal fluctuations at medium and low flow caused by powerplants on tributary streams. Flow regulated by Lakes Wallenpaupack and Hopatcong, and by Pepacton, Cannonsville, Swinging Bridge, Toronto, Cliff Lake, Neversink, and Wild Creek Reservoirs (see Delaware River Basin, reservoirs in) and smaller reservoirs. Diversion from Pepacton, Cannonsville, and Neversink Reservoirs and to Delaware and Raritan Canal (see Delaware River Basin, diversions). Water diverted just above station by borough of Morrisville, PA, and city of Trenton for municipal supply (see Delaware River Basin, diversions).

AVERAGE DISCHARGE.--68 years, 11,750 ft^3/s (332.8 m^3/s), unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 329,000 ft^3/s (9,320 m^3/s) Aug. 20, 1955, elevation, 28.60 ft (8.717 m) from high-water mark in gage house, from rating curve extended above 230,000 ft^3/s (6,510 m^3/s); minimum, 1,180 ft^3/s (33.4 m^3/s) Oct. 31, 1963, elevation, 7.26 ft (2.213 m). Flow in Delaware and Raritan Canal not included.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Oct. 11, 1903, reached an elevation of about 28.5 ft (8.69 m) National Geodetic Vertical Datum of 1929, discharge estimated, 295,000 ft^3/s (8,350 m^3/s). Maximum elevation since 1903, 30.6 ft (9.33 m) National Geodetic Vertical Datum of 1929, Mar. 8, 1904, from floodmark (ice jam).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 50,000 ft^3/s (1,420 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Elevation (ft)	Elevation (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Elevation (ft)	Elevation (m)
Nov. 28	1130	55700	1580	14.45	4.404	Apr. 11	1130	50400	1430	14.03	4.276
Mar. 23	0615	*104000	2950	17.83	5.435						

Minimum discharge, 2,420 ft^3/s (68.5 m^3/s) Aug. 23, Sept. 30, gage height, 7.82 ft (2.384 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10000	7620	20200	9930	4510	3900	39400	32900	5070	4550	3030	3050
2	18900	7260	17200	10100	4000	3460	37100	27600	5930	5430	3230	3100
3	20900	10900	15100	8880	3900	4090	33500	23500	5650	5710	3340	3040
4	25200	16200	13800	9030	4000	3370	32700	19900	7300	4930	3660	2970
5	23000	21500	13700	8640	4800	3760	32400	16800	7270	4570	4210	2930
6	31800	17400	12800	7970	4200	4310	30200	14800	6070	4450	4470	2830
7	32900	14900	12900	6870	4400	3950	25600	14900	5390	5030	4350	3040
8	28900	13300	11700	6160	4500	3860	21500	13600	5520	4490	4070	2830
9	22300	12100	10600	6500	4400	4630	22700	12400	5570	4570	3810	2970
10	24400	11500	9210	6520	4330	5340	34900	11300	5810	4500	3630	2800
11	22900	11700	8550	6360	4270	7110	47800	10600	5780	4200	3490	2740
12	19200	12900	8700	10900	3980	7490	40600	9930	5620	4140	2950	2690
13	17500	11900	8870	11200	3970	6240	31900	14800	5560	4310	2950	2660
14	15500	11200	10500	8880	3760	6230	28200	14300	5020	3800	3130	2840
15	13600	10600	10100	8520	3830	5340	30600	12000	4590	3710	3070	3220
16	11900	9710	9510	8600	3970	6330	34800	10900	4310	3460	3050	3070
17	11900	9020	8810	8270	4000	5950	33000	9730	4270	3840	3140	2870
18	11300	8680	8240	7580	3650	14100	28300	8810	4240	3780	3080	3730
19	11100	8530	8130	9160	3480	23200	23900	8300	4320	3710	2910	3660
20	10300	8600	7960	8540	3670	27500	20200	8180	4170	3500	2730	3480
21	9680	8290	7700	7400	3780	29500	17600	8680	4080	3200	2820	3280
22	8310	8030	7580	6770	4300	69800	16100	9440	4030	3100	2500	3150
23	7810	7800	8120	6420	4850	88700	15300	8660	4000	3260	2560	2800
24	8420	7110	7920	6520	4990	52000	13800	7780	4060	4350	2650	2720
25	9790	6930	9410	6240	5380	46800	12800	7110	3900	3930	2640	3070
26	9880	8130	14300	5580	4720	40600	11800	6550	3730	3660	2650	2840
27	10000	30300	17000	5630	4140	34100	11300	5900	3650	3380	2770	2770
28	9020	48700	15600	5260	3670	26500	13400	5530	3680	3220	3080	2850
29	8160	35200	13600	5390	3640	25700	23100	5160	3590	3150	3140	2800
30	7860	25600	12100	4950	---	29200	33800	4840	4040	3130	3000	2640
31	7770	---	10700	4720	---	35700	---	4620	---	3200	3020	---
TOTAL	480200	421610	350610	233490	121090	628760	798300	369520	146220	124260	99130	89440
MEAN	15490	14050	11310	7532	4176	20280	26610	11920	4874	4008	3198	2981
MAX	32900	48700	20200	11200	5380	88700	47800	32900	7300	5710	4470	3730
MIN	7770	6930	7580	4720	3480	3370	11300	4620	3590	3100	2500	2640

CAL YR 1979 TOTAL 5754040 MEAN 15760 MAX 106000 MIN 3300
WTR YR 1980 TOTAL 3862630 MEAN 10550 MAX 88700 MIN 2500

01463500 DELAWARE RIVER AT TRENTON, NJ--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1945 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: June 1968 to September 1978, May 1979 to current year.
pH: June 1968 to September 1978, May to September 1978, February to September 1980.
WATER TEMPERATURES: October 1944 to September 1978, May 1979 to current year.
DISSOLVED OXYGEN: October 1962 to September 1978, May 1979 to current year.
SUSPENDED-SEDIMENT DISCHARGE: September 1949 to current year.

INSTRUMENTATION.--Temperature recorder since October 1944, water-quality recorder since October 1962.

REMARKS.--Missing continuous water-quality records are the result of malfunction of sensor or sampling mechanism.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 400 micromhos Jan. 24, 1959; minimum, 50 micromhos Mar. 19, 1945.
pH: Maximum, 10.2 July 5, 6, 1971, June 14, 15, 1974; minimum, 5.3 June 22, 1972.
WATER TEMPERATURES: Maximum, 34.0°C June 18, 1957; minimum 0.0°C on many days during winter months.
DISSOLVED OXYGEN: Maximum, 18.4 mg/L January 10, 1980; minimum, 4.0 mg/L Nov. 9, 1972.
SEDIMENT CONCENTRATIONS: Maximum daily, 1,720 mg/L Nov. 26, 1950; minimum daily, less than 0.5 mg/L Oct. 21, 1952 and Jan. 18, 1970.
SEDIMENT LOADS: Maximum daily, 1,087,000 tons (986,126 tonnes) Aug. 20, 1955; minimum daily, less than 0.5 ton (0.45 tonnes) Oct. 21, 1952.

EXTREMES FOR CURRENT YEAR.--
SEDIMENT CONCENTRATIONS: Maximum daily mean, 550 mg/L Mar. 22, 1980; minimum daily mean, 1 mg/L on several days during January, February and March.
SEDIMENT LOADS: Maximum daily, 104,000 tons (94,000 Mg) Mar. 22, 1980; minimum daily, 9.1 tons (8.3 Mg) Mar. 4, 1980.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L)	OXYGEN DEMAND, BIOCHEM UNINHIB 5 DAY (MG/L)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)
NOV 29...	1330	33600	81	7.1	8.5	5.0	11.2	32	1.6	5700	2000
DEC 12...	1230	9110	160	7.6	5.0	1.0	13.3	5	1.0	90	26
JAN 23...	1130	6140	192	8.1	3.5	.50	13.8	16	1.3	15	K11
FEB 13...	1130	3880	223	8.7	2.5	.80	16.9	--	1.6	K7	34
MAR 26...	1200	41000	98	7.3	4.0	.50	14.0	12	1.9	140	230
APR 23...	1200	15200	128	7.7	13.0	1.0	10.7	11	1.5	100	K52
MAY 15...	1230	12000	151	7.7	17.5	1.6	10.4	--	2.0	150	87
JUN 18...	1200	4080	212	9.2	24.0	.30	11.8	--	4.1	8	200
JUL 24...	1130	4220	224	8.8	28.0	3.0	8.9	--	3.0	K39	200
AUG 12...	1100	2890	198	8.5	27.5	2.3	8.1	--	2.3	K9	660
SEP 16...	1305	3030	225	8.3	22.0	.30	9.1	14	1.9	71	290

DATE	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)
NOV 29...	31	8.5	2.4	3.2	1.2	22	12	5.1	.1	4.6
DEC 12...	61	16	5.1	7.0	1.3	34	21	9.9	.1	4.6
JAN 23...	71	18	6.4	8.5	1.1	46	25	11	.1	4.1
FEB 13...	83	22	6.9	9.8	1.6	52	26	14	.1	2.2
MAR 26...	33	8.9	2.7	4.9	1.1	16	13	6.9	.1	4.0
APR 23...	45	12	3.7	5.0	1.1	25	16	8.0	.1	3.0
MAY 15...	56	14	5.0	7.7	1.1	31	19	9.2	.1	4.1
JUN 18...	83	21	7.3	9.3	1.6	52	26	14	.1	1.9
JUL 24...	86	22	7.6	9.6	1.9	62	29	13	.1	3.8
AUG 12...	70	18	6.2	8.9	1.6	45	22	12	.1	3.1
SEP 16...	79	20	7.1	10	1.9	46	26	14	.1	2.6

01463500 DELAWARE RIVER AT TRENTON, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)
NOV 29...	54	104	9440	68	.62	.58	.060	.060	.81	.52
DEC 12...	98	10	246	14	1.1	1.1	.110	.090	.41	.07
JAN 23...	98	1	17	40	1.3	1.1	--	.070	--	.38
FEB 13...	118	1	10	50	1.2	1.2	.080	.080	.20	.20
MAR 26...	67	37	4100	48	.96	.89	.100	.100	.25	.16
APR 23...	80	9	369	63	.75	.72	.050	.050	.24	.13
MAY 15...	94	17	551	70	1.0	1.0	.070	.070	.29	.24
JUN 18...	125	13	143	63	1.1	1.1	.040	.020	.60	.24
JUL 24...	149	9	103	86	1.0	1.0	.010	.000	.18	.16
AUG 12...	100	3	23	70	.72	.70	.020	.010	.25	.19
SEP 16...	138	4	33	65	1.2	1.2	.020	.020	.28	.14

DATE	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, NH4 + ORG. SUSP. TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N)	NITRO-GEN, DIS-SOLVED (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CARBON, ORGANIC SUS-PENDED (MG/L AS C)
NOV 29...	.87	.29	.58	1.2	1.5	.110	.110	--	4.3	2.1
DEC 12...	.52	.36	.16	1.3	1.6	.070	.060	2.8	--	--
JAN 23...	--	--	.45	1.6	--	.170	.060	2.7	--	--
FEB 13...	.28	.00	.28	1.5	1.5	.100	.090	--	3.0	.8
MAR 26...	.35	.09	.26	1.2	1.3	.060	.030	5.0	--	--
APR 23...	.29	.11	.18	.90	1.0	.050	.030	2.1	--	--
MAY 15...	.36	.05	.31	1.3	1.4	.060	.050	--	3.6	.3
JUN 18...	.64	.38	.26	1.4	1.7	.100	.050	2.0	--	--
JUL 24...	.19	.03	.16	1.2	1.2	.130	.060	3.6	--	--
AUG 12...	.27	.07	.20	.90	.99	.100	.070	--	3.1	.4
SEP 16...	.30	.14	.16	1.4	1.5	.130	.110	2.6	--	--

DATE	TIME	ARSENIC TOTAL (UG/L AS AS)	ARSENIC SUS-PENDED TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)	BARIUM, SUS-PENDED RECOV-ERABLE (UG/L AS BA)	BARIUM, DIS-SOLVED (UG/L AS BA)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM SUS-PENDED RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)
NOV 29...	1330	1	0	1	40	0	40	2	0	2	10
FEB 13...	1130	1	0	1	100	70	30	2	0	2	<10
MAY 15...	1230	2	1	1	<50	--	30	0	0	0	10
AUG 12...	1100	1	0	1	100	--	<50	0	0	<10	<10

01463500 DELAWARE RIVER AT TRENTON, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	CHROMIUM, SUSPENDED RECOV. (UG/L AS CR)	CHROMIUM, DISSOLVED (UG/L AS CR)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)	COBALT, SUSPENDED RECOVERABLE (UG/L AS CO)	COBALT, DISSOLVED (UG/L AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, SUSPENDED RECOVERABLE (UG/L AS CU)	COPPER, DISSOLVED (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, SUSPENDED RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)
NOV 29...	0	10	5	0	5	8	5	3	2600	1800	790
FEB 13...	0	<10	0	0	0	7	4	3	140	120	20
MAY 15...	--	<10	0	0	0	5	1	4	350	310	40
AUG 12...	--	<10	0	0	0	4	1	3	180	160	20

DATE	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, SUSPENDED RECOVERABLE (UG/L AS PB)	LEAD, DISSOLVED (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, SUSPENDED RECOV. (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MERCURY SUSPENDED RECOVERABLE (UG/L AS HG)	MERCURY DISSOLVED (UG/L AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	NICKEL, SUSPENDED RECOVERABLE (UG/L AS NI)
NOV 29...	7	5	2	260	140	120	<.1	.0	<.1	5	4
FEB 13...	4	4	0	40	10	30	<.1	.0	<.1	3	1
MAY 15...	4	4	0	50	40	10	.2	.0	.2	1	1
AUG 12...	3	0	3	60	50	10	.1	--	<.1	4	4

DATE	NICKEL, DISSOLVED (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	SELENIUM, SUSPENDED TOTAL (UG/L AS SE)	SELENIUM, DISSOLVED (UG/L AS SE)	SILVER, TOTAL RECOVERABLE (UG/L AS AG)	SILVER, SUSPENDED RECOVERABLE (UG/L AS AG)	SILVER, DISSOLVED (UG/L AS AG)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, SUSPENDED RECOVERABLE (UG/L AS ZN)	ZINC, DISSOLVED (UG/L AS ZN)	GROSS ALPHA, DISSOLVED (UG/L AS U-NAT)
NOV 29...	1	0	0	0	0	0	0	70	30	40	<.8
FEB 13...	2	1	1	0	0	0	0	40	0	40	--
MAY 15...	0	0	0	0	0	0	0	50	30	20	<1.3
AUG 12...	0	0	0	0	0	0	0	20	20	0	--

DATE	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT)	GROSS ALPHA, DISSOLVED (PCI/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (PCI/L AS U-NAT)	GROSS BETA, DISSOLVED (PCI/L AS CS-137)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137)	GROSS BETA, DISSOLVED (PCI/L AS SR/YT-90)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/YT-90)	RADIUM 226, DISSOLVED, RADON METHOD (PCI/L)	URANIUM DISSOLVED, EXTRACTION (UG/L)	PCB TOTAL (UG/L)	PCB, TOTAL IN BOTTOM MATERIAL (UG/KG)
NOV 29...	4.3	<.5	2.9	1.8	3.5	1.7	3.6	.04	.20	ND	ND
FEB 13...	--	--	--	--	--	--	--	--	--	ND	--
MAY 15...	<.4	<.9	<.3	1.4	<.4	1.4	<.4	.04	.09	--	--
AUG 12...	--	--	--	--	--	--	--	--	--	--	--

DATE	ALDRIN, TOTAL (UG/L)	ALDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	CHLORDANE, TOTAL (UG/L)	CHLORDANE, TOTAL IN BOTTOM MATERIAL (UG/KG)	P,P' DDD, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDD, TOTAL (UG/L)	O,P' DDE, TOTAL IN BOTTOM MATERIAL (UG/KG)	P,P' DDE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDE, TOTAL (UG/L)	O,P' DDT, TOTAL IN BOTTOM MATERIAL (UG/KG)	P,P' DDT, TOTAL IN BOTTOM MATERIAL (UG/KG)
NOV 29...	ND	ND	ND	ND	6.8	ND	ND	18	ND	ND	36
FEB 13...	ND	--	ND	--	--	ND	--	--	ND	--	--
MAY 15...	--	--	--	--	--	--	--	--	--	--	--
AUG 12...	--	--	--	--	--	--	--	--	--	--	--

01463500 DELAWARE RIVER AT TRENTON, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	DDT, TOTAL (UG/L)	DI-AZINON, TOTAL (UG/L)	DI-AZINON, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	DI-ELDRIN TOTAL (UG/L)	DI-ELDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	ENDRIN, TOTAL (UG/L)	ENDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	ETHION, TOTAL (UG/L)	ETHION, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	HEPTA-CHLOR, TOTAL (UG/L)	HEPTA-CHLOR, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)
NOV											
29...	ND	ND	ND	ND	.9	ND	ND	ND	ND	ND	ND
FEB											
13...	ND	ND	--	ND	--	ND	--	ND	--	ND	--
MAY											
15...	--	--	--	--	--	--	--	--	--	--	--
AUG											
12...	--	--	--	--	--	--	--	--	--	--	--

DATE	HEPTA-CHLOR EPOXIDE TOTAL (UG/L)	HEPTA-CHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)	LINDANE TOTAL (UG/L)	LINDANE TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	MALA-THION, TOTAL (UG/L)	MALA-THION, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	METH-OXY-CHLOR, TOTAL (UG/L)	METH-OXY-CHLOR, TOT. IN BOTTOM MATL. (UG/KG)	METHYL PARA-THION, TOTAL (UG/L)	METHYL PARA-THION, TOT. IN BOTTOM MATL. (UG/KG)	METHYL TRI-THION, TOTAL (UG/L)
NOV											
29...	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
FEB											
13...	ND	--	ND	--	ND	--	ND	--	ND	--	ND
MAY											
15...	--	--	--	--	--	--	--	--	--	--	--
AUG											
12...	--	--	--	--	--	--	--	--	--	--	--

DATE	METHYL TRI-THION, TOT. IN BOTTOM MATL. (UG/KG)	PARA-THION, TOTAL (UG/L)	PARA-THION, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	TOX-APHENE, TOTAL (UG/L)	TOXA-PHENE, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	TOTAL TRI-THION (UG/L)	TRI-THION, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	2,4-D, TOTAL (UG/L)	2,4,5-T TOTAL (UG/L)	SILVEX, TOTAL (UG/L)
NOV										
29...	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
FEB										
13...	--	ND	--	ND	--	ND	--	--	--	--
MAY										
15...	--	--	--	--	--	--	--	--	--	--
AUG										
12...	--	--	--	--	--	--	--	--	--	--

DATE	LENGTH OF EXPO-SURE (DAYS)	PERI-PHYTON BIOMASS TOTAL DRY WEIGHT G/SQ M	PERI-PHYTON BIOMASS ASH WEIGHT G/SQ M	CHLOR-A PERI-PHYTON CHROMO-GRAPHIC FLUOROM (MG/M2)	CHLOR-B PERI-PHYTON CHROMO-GRAPHIC FLUOROM (MG/M2)	BIOMASS CHLORO-PHYLL RATIO PERI-PHYTON (UNITS)
DEC						
12...	12	.870	.790	.090	.000	889
JAN						
17...	23	14.2	12.9	3.34	.250	389
APR						
23...	27	21.3	19.4	17.9	.000	106
MAY						
15...	21	13.6	12.1	5.98	.820	251
AUG						
08...	14	1.65	1.02	3.04	.830	207

01463500 DELAWARE RIVER AT TRENTON, NJ--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1							---	---	---	147	144	146
2							---	---	---	148	144	147
3							---	---	---	149	142	144
4							---	---	---	159	150	155
5							---	---	---	159	153	155
6							---	---	---	162	155	157
7							---	---	---	168	164	166
8							---	---	---	180	169	175
9							---	---	---	190	181	186
10							---	---	---	193	181	187
11							---	---	---	194	177	191
12							---	---	---	198	157	174
13							161	156	---	182	177	179
14							161	157	159	177	167	180
15							161	159	160	172	169	171
16							157	149	153	175	170	171
17							157	147	150	174	169	---
18							164	157	160	---	---	---
19							164	162	163	---	---	---
20							165	160	163	---	---	---
21							166	161	163	---	---	---
22							174	166	169	---	---	---
23							173	163	166	---	---	---
24							178	166	174	---	---	---
25							182	173	179	---	---	---
26							180	164	174	---	---	---
27							160	129	143	---	---	---
28							131	126	128	---	---	---
29							136	129	134	---	---	---
30							139	134	136	---	---	---
31							146	138	142	---	---	---
MONTH							182	126	156	198	142	168

DAY	FEBRUARY			MARCH			APRIL			MAY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	---	---	---	121	106	116	131	102	118
2	---	---	---	---	---	---	120	115	118	124	104	114
3	---	---	---	246	240	---	118	116	117	126	110	116
4	---	---	---	246	229	237	117	114	116	121	116	118
5	---	---	---	243	231	238	120	115	118	125	118	121
6	---	---	---	236	229	232	114	111	112	133	119	127
7	---	---	---	230	218	223	114	111	113	135	120	128
8	---	---	---	232	223	227	133	113	123	137	119	130
9	---	---	---	232	223	227	133	123	130	138	118	130
10	---	---	---	226	219	222	135	120	130	145	122	138
11	---	---	---	225	190	208	117	94	103	150	126	146
12	---	---	---	188	171	176	96	92	94	155	148	151
13	---	---	---	177	168	171	102	95	98	158	148	153
14	---	---	---	209	177	195	105	100	102	162	143	150
15	---	---	---	207	200	203	109	104	107	155	137	151
16	236	223	230	219	203	211	106	103	104	169	157	162
17	236	229	233	209	203	206	106	101	103	172	153	168
18	---	---	---	201	146	169	105	103	104	179	156	173
19	---	---	---	208	152	179	118	105	112	186	168	180
20	---	---	---	151	119	130	123	114	120	184	173	182
21	243	235	---	124	102	114	132	122	126	188	183	185
22	247	241	243	127	81	108	136	130	133	187	177	182
23	249	238	242	79	74	76	137	133	135	184	178	181
24	249	237	241	89	80	85	145	136	141	186	176	180
25	250	242	246	100	90	96	150	145	148	188	179	182
26	244	228	234	100	97	99	160	150	156	187	181	184
27	---	---	---	103	98	101	168	161	165	191	185	189
28	---	---	---	113	103	108	182	164	170	196	189	193
29	---	---	---	121	113	117	177	155	169	203	195	199
30	---	---	---	119	113	117	150	125	136	207	201	204
31	---	---	---	112	105	107	---	---	---	221	206	210
MONTH	250	223	238	246	74	164	182	92	124	221	102	160

01463500 DELAWARE RIVER AT TRENTON, NJ--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEC. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	226	215	220	228	220	224	228	218	223	210	199	206
2	223	218	221	228	198	215	221	217	219	208	200	206
3	222	203	211	197	177	185	223	218	221	211	205	208
4	212	201	205	175	172	174	220	214	217	206	196	211
5	216	200	207	179	173	176	218	209	---	204	197	201
6	201	192	196	182	173	178	---	---	---	215	198	205
7	197	192	194	201	181	189	---	---	---	213	201	210
8	205	198	202	202	190	198	---	---	---	219	213	216
9	---	---	---	217	202	208	---	---	---	222	214	219
10	---	---	---	222	203	212	---	---	---	225	219	222
11	---	---	---	210	201	204	---	---	---	221	217	219
12	---	---	---	216	204	212	---	---	---	233	221	222
13	---	---	---	216	211	214	217	209	---	238	230	235
14	---	---	---	213	208	210	225	215	221	250	246	248
15	---	---	---	216	207	210	225	215	220	259	223	251
16	---	---	---	220	210	217	---	---	---	262	253	258
17	220	210	214	230	218	223	---	---	---	267	182	227
18	220	213	216	226	213	---	---	---	---	237	138	192
19	---	---	---	---	---	---	---	---	---	261	190	204
20	---	---	---	---	---	---	---	---	---	226	211	---
21	---	---	---	---	---	---	---	---	---	239	227	232
22	---	---	---	---	---	---	---	---	---	238	225	232
23	---	---	---	---	---	---	229	217	220	239	219	---
24	---	---	---	224	204	---	234	229	232	---	---	---
25	225	217	221	218	212	215	239	235	237	---	---	---
26	227	216	220	221	211	217	237	226	232	---	---	---
27	239	221	225	220	207	211	234	224	228	---	---	---
28	254	234	244	208	200	204	229	222	226	---	---	---
29	255	233	240	212	195	204	237	229	233	232	228	---
30	235	210	228	215	206	211	239	225	233	246	223	230
31	---	---	---	224	211	215	227	211	219	---	---	---
MONTH	255	192	217	230	172	205	239	209	225	267	138	221

PH (STANDARD UNITS), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1												
2												
3												
4												
5												
6												
7												
8												
9												
10												
11												
12												
13												
14												
15												
16												
17												
18												
19												
20												
21												
22												
23												
24												
25												
26												
27												
28												
29												
30												
31												
MONTH												

01463500 DELAWARE RIVER AT TRENTON, NJ--Continued

PH (STANDARD UNITS), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	---	---	---	---	---	---	7.1	7.0	7.1	7.5	7.4	7.4
2	---	---	---	---	---	---	7.2	7.1	7.2	7.6	7.4	7.5
3	---	---	---	---	---	---	7.2	7.2	7.2	7.5	7.3	7.4
4	---	---	---	9.3	8.5	9.0	7.2	7.2	7.2	7.4	7.2	7.3
5	---	---	---	9.3	8.5	8.9	7.3	7.2	7.3	7.6	7.2	7.4
6	---	---	---	9.3	8.3	8.9	7.3	7.2	7.3	8.0	7.3	7.6
7	---	---	---	9.0	8.4	8.7	7.4	7.3	7.3	8.2	7.3	7.7
8	---	---	---	8.9	7.9	8.4	7.4	7.3	7.3	7.7	7.3	7.5
9	---	---	---	8.5	7.5	8.0	7.4	7.2	7.3	8.0	7.4	7.6
10	---	---	---	8.7	7.5	8.1	7.3	7.2	7.3	8.3	7.3	7.8
11	---	---	---	8.4	7.8	8.0	7.3	7.3	7.3	8.1	7.4	7.8
12	---	---	---	8.6	7.8	8.2	7.3	7.3	7.3	8.1	7.3	7.5
13	---	---	---	8.6	7.7	8.0	7.5	7.3	7.4	7.4	7.2	7.3
14	---	---	---	8.2	7.6	7.8	7.5	7.4	7.5	7.4	7.2	7.3
15	---	---	---	8.5	7.6	8.0	7.5	7.5	7.5	7.8	7.3	7.5
16	9.1	8.5	8.8	8.5	7.7	8.1	7.5	7.5	7.5	7.8	7.3	7.5
17	9.3	8.3	8.8	8.5	7.5	7.9	7.5	7.5	7.5	8.1	7.2	7.6
18	---	---	---	7.5	7.2	7.3	7.6	7.6	7.6	7.8	7.3	7.5
19	---	---	---	7.4	7.2	7.3	7.6	7.5	7.6	8.3	7.3	7.8
20	---	---	---	7.2	7.2	7.2	7.6	7.5	7.6	8.3	7.5	7.9
21	9.0	8.5	---	7.2	6.7	7.0	7.6	7.4	7.5	7.8	7.5	7.6
22	8.7	7.9	8.4	7.2	6.8	7.0	7.6	7.4	7.5	8.3	7.5	7.9
23	8.7	7.7	8.2	6.7	6.7	6.7	7.7	7.4	7.5	8.6	7.7	8.0
24	8.8	7.8	8.2	6.9	6.8	6.8	7.9	7.4	7.6	8.6	7.7	8.2
25	8.8	7.8	8.3	6.9	6.9	6.9	7.7	7.2	7.5	8.9	7.8	8.4
26	8.9	8.0	8.5	7.0	6.9	7.0	7.5	7.2	7.3	9.1	8.2	8.8
27	---	---	---	7.0	7.0	7.0	7.7	7.3	7.4	9.3	8.6	9.0
28	---	---	---	7.1	7.0	7.0	7.8	7.4	7.5	9.3	8.8	9.1
29	---	---	---	7.1	7.1	7.1	7.5	7.5	7.5	9.3	8.8	9.1
30	---	---	---	7.1	7.1	7.1	7.5	7.4	7.5	9.2	8.8	9.0
31	---	---	---	7.1	7.0	7.1	---	---	---	9.1	8.5	8.8
MONTH	9.3	7.7	8.5	9.3	6.7	7.7	7.9	7.0	7.4	9.3	7.2	7.9

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	9.1	8.1	8.7	9.0	8.3	8.7	8.9	8.4	8.6	8.5	7.7	8.1
2	8.5	7.9	8.3	9.0	8.3	8.7	9.0	8.3	8.7	8.5	7.7	8.1
3	8.4	7.5	7.8	8.5	8.2	8.4	9.0	8.4	8.7	8.4	7.7	8.0
4	8.2	7.4	7.7	8.9	8.1	8.5	8.8	8.3	8.6	8.5	7.6	8.1
5	8.0	7.3	7.6	9.0	8.2	8.6	8.5	7.9	---	8.3	7.7	8.0
6	8.2	7.4	7.7	9.2	8.3	8.8	---	---	---	8.5	7.6	8.0
7	8.4	7.4	7.9	8.9	8.5	8.8	---	---	---	8.5	7.7	8.1
8	8.5	7.6	8.0	9.0	8.3	8.7	---	---	---	8.9	7.9	8.5
9	---	---	---	9.1	8.5	8.8	---	---	---	9.1	8.7	8.9
10	---	---	---	9.1	8.5	8.9	---	---	---	8.9	8.4	8.7
11	---	---	---	9.2	8.5	8.8	---	---	---	8.8	8.1	8.5
12	---	---	---	9.1	8.4	8.8	---	---	---	8.7	8.1	8.4
13	---	---	---	9.2	8.5	8.9	9.1	8.9	---	8.7	7.9	8.3
14	---	---	---	9.2	8.5	8.9	9.2	8.5	8.9	8.5	7.9	8.2
15	---	---	---	9.3	8.7	9.1	9.1	8.6	8.9	8.3	7.6	7.9
16	---	---	---	9.3	8.8	9.0	---	---	---	8.4	7.7	8.0
17	9.3	8.5	8.9	9.1	8.5	8.8	---	---	---	8.3	7.7	7.9
18	9.3	8.8	9.1	9.0	8.3	8.7	---	---	---	8.0	7.4	7.7
19	---	---	---	9.1	8.4	8.8	---	---	---	8.0	7.5	7.7
20	---	---	---	9.2	8.4	8.9	---	---	---	8.1	7.4	7.7
21	---	---	---	9.2	8.6	8.9	---	---	---	8.3	7.4	7.8
22	---	---	---	9.2	8.0	8.9	---	---	---	8.3	7.4	7.8
23	---	---	---	9.0	8.3	8.7	8.6	7.8	8.2	8.3	7.4	7.8
24	---	---	---	9.0	8.3	8.7	8.6	7.8	8.3	8.4	7.4	7.8
25	9.4	9.0	9.2	9.2	8.4	8.8	8.6	7.8	8.3	---	---	---
26	9.5	9.1	9.3	9.3	8.6	9.0	8.7	7.9	8.3	---	---	---
27	9.4	9.0	9.2	9.3	8.6	9.0	8.7	8.0	8.4	---	---	---
28	9.4	9.0	9.2	9.2	8.6	8.9	8.7	8.0	8.3	---	---	---
29	9.3	8.8	9.0	8.9	8.3	8.6	8.5	7.9	8.2	8.7	8.2	---
30	9.0	8.3	8.7	9.1	8.2	8.7	8.5	7.8	8.1	8.7	7.8	8.2
31	---	---	---	9.0	8.3	8.7	8.5	7.8	8.2	---	---	---
MONTH	9.5	7.3	8.5	9.3	8.0	8.8	9.2	7.8	8.5	9.1	7.4	8.1

01463500 DELAWARE RIVER AT TRENTON, NJ--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1							---	---	---	4.5	4.0	4.0
2							---	---	---	4.0	3.5	4.0
3							5.0	5.0	---	4.0	3.5	3.5
4							5.0	4.5	4.5	3.5	3.0	3.0
5							5.0	4.0	4.5	3.0	2.5	3.0
6							5.0	4.5	4.5	3.0	2.0	2.5
7							6.0	5.0	5.5	2.5	2.0	2.5
8							6.5	5.5	6.0	3.0	2.0	2.5
9							6.0	5.0	5.5	3.0	2.5	2.5
10							6.0	5.0	5.5	3.0	2.0	2.5
11							6.0	5.0	5.5	5.0	2.0	3.5
12							7.0	6.0	6.5	5.5	3.5	4.5
13							7.0	6.5	6.5	3.5	3.0	3.5
14							6.5	6.0	6.0	4.0	3.0	3.5
15							6.0	5.5	6.0	5.5	4.0	4.5
16							5.5	5.0	5.0	5.5	4.5	5.0
17							5.5	3.0	4.5	5.0	4.5	---
18							3.0	2.5	3.0	---	---	---
19							2.5	2.0	2.0	---	---	---
20							2.0	1.5	2.0	---	---	---
21							2.0	1.5	2.0	---	---	---
22							3.0	2.0	2.5	---	---	---
23							4.0	3.0	3.5	---	---	---
24							5.0	4.0	4.5	---	---	---
25							6.5	5.0	6.0	---	---	---
26							7.0	6.0	6.5	---	---	---
27							6.0	5.0	5.5	---	---	---
28							5.0	4.5	5.0	---	---	---
29							5.0	4.0	4.5	---	---	---
30							5.5	4.5	5.0	---	---	---
31							5.0	4.5	4.5	---	---	---
MONTH							7.0	1.5	4.5	5.5	2.0	3.5

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	---	---	---	---	---	---	6.5	5.0	6.0	12.5	11.0	11.5
2	---	---	---	---	---	---	7.0	6.0	6.5	14.0	12.5	13.0
3	---	---	---	2.0	.0	---	8.0	6.5	7.0	16.0	13.5	14.5
4	---	---	---	4.0	.0	2.0	8.5	7.5	8.0	16.5	15.0	15.5
5	---	---	---	4.0	2.5	3.0	9.0	8.0	8.5	17.5	15.5	16.5
6	---	---	---	6.5	3.5	5.0	9.5	8.0	8.5	18.5	17.0	17.5
7	---	---	---	6.0	4.5	5.0	10.0	8.5	9.5	19.0	17.0	18.0
8	---	---	---	8.0	5.5	7.0	10.5	9.5	10.0	18.5	16.5	17.0
9	---	---	---	8.5	6.5	7.5	11.0	10.5	11.0	16.5	15.5	16.0
10	---	---	---	9.0	6.0	7.5	12.0	10.5	11.5	17.0	15.0	16.0
11	---	---	---	8.0	5.5	7.0	11.5	11.0	11.0	16.0	15.5	15.5
12	---	---	---	5.5	4.0	5.0	11.0	10.0	11.0	16.0	15.0	15.5
13	---	---	---	4.5	2.0	3.5	12.0	10.5	11.5	17.5	15.5	16.5
14	---	---	---	2.5	2.0	2.0	12.0	11.0	11.5	18.0	16.5	17.5
15	---	---	---	4.5	1.5	3.0	11.5	11.0	11.5	18.5	16.5	17.5
16	3.0	1.5	2.5	5.5	2.5	4.0	10.5	9.5	10.0	18.5	16.5	17.5
17	2.0	.5	1.5	6.5	4.5	5.5	9.5	8.5	9.0	19.0	17.0	18.0
18	---	---	---	6.5	5.5	6.0	10.0	8.5	9.0	17.5	17.0	17.0
19	---	---	---	6.5	5.5	6.0	10.5	9.0	10.0	19.0	17.0	18.0
20	---	---	---	5.5	4.5	5.0	12.0	10.0	11.0	19.0	18.5	18.5
21	6.5	3.5	---	7.0	5.0	6.0	13.5	11.5	12.5	18.5	17.5	18.0
22	5.0	4.0	4.5	6.0	3.5	5.0	14.0	12.0	13.0	20.0	17.0	18.5
23	6.0	4.0	5.0	3.0	2.0	2.5	14.5	12.5	13.5	22.0	19.5	20.5
24	6.5	5.0	5.5	4.5	3.0	4.0	15.0	13.0	14.0	22.5	21.0	21.5
25	6.0	4.5	5.0	4.5	4.5	4.5	15.0	14.0	14.5	24.0	21.0	22.0
26	5.5	2.5	4.0	4.5	4.0	4.5	14.5	13.5	14.0	23.0	20.5	21.5
27	---	---	---	5.5	4.0	5.0	13.5	13.0	13.5	21.5	19.5	20.5
28	---	---	---	6.5	5.0	5.5	13.0	11.5	12.5	22.0	19.0	20.5
29	---	---	---	7.0	6.0	6.5	12.0	11.5	11.5	23.5	20.0	21.5
30	---	---	---	7.5	6.5	7.0	11.5	11.0	11.5	22.0	20.5	21.0
31	---	---	---	7.0	5.5	6.5	---	---	---	22.5	20.0	21.0
MONTH	6.5	.5	4.0	9.0	.0	5.0	15.0	5.0	11.0	24.0	11.0	18.0

01463500 DELAWARE RIVER AT TRENTON, NJ--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	24.5	20.5	22.5	27.5	24.0	25.5	30.5	27.5	28.5	30.5	26.5	28.5
2	24.0	23.0	23.5	27.5	24.5	25.5	30.5	27.0	28.5	31.0	27.5	29.0
3	25.0	22.5	23.0	25.5	24.5	25.0	31.5	27.5	29.0	30.0	27.0	28.5
4	23.0	21.0	22.0	27.5	23.5	25.5	31.5	28.0	29.5	29.0	25.5	27.0
5	23.0	20.5	21.5	26.5	24.5	25.5	31.0	28.0	---	27.0	25.5	26.0
6	23.0	20.5	21.5	26.5	24.0	25.0	---	---	---	29.0	25.0	26.5
7	24.5	21.0	22.5	26.0	22.5	24.0	---	---	---	28.0	25.0	26.5
8	24.5	21.0	23.0	25.5	23.5	24.5	---	---	---	27.5	23.5	25.5
9	---	---	---	27.5	23.5	25.5	---	---	---	26.5	23.0	24.5
10	---	---	---	28.0	25.0	26.5	---	---	---	27.0	23.5	25.0
11	---	---	---	29.0	25.5	27.0	---	---	---	26.0	22.0	24.0
12	---	---	---	28.5	25.5	27.0	---	---	---	26.0	22.5	24.0
13	---	---	---	28.5	24.5	26.5	29.5	27.5	---	26.0	22.0	23.5
14	---	---	---	29.5	24.5	27.0	28.5	26.0	27.5	25.0	23.5	24.0
15	---	---	---	29.0	25.5	27.0	27.5	26.0	27.0	24.5	22.5	23.0
16	---	---	---	30.0	26.0	27.5	---	---	---	23.0	21.0	22.0
17	25.5	20.5	23.0	29.0	26.5	27.5	---	---	---	22.5	20.5	21.5
18	24.5	21.5	23.0	30.0	26.5	28.5	---	---	---	24.0	21.5	22.5
19	---	---	---	30.5	27.5	---	---	---	---	24.0	21.0	22.5
20	---	---	---	---	---	---	---	---	---	24.0	21.0	22.0
21	---	---	---	---	---	---	---	---	---	25.5	21.5	23.0
22	---	---	---	---	---	---	---	---	---	27.0	23.0	24.5
23	---	---	---	---	---	---	27.5	22.5	25.0	26.5	24.0	25.0
24	---	---	---	---	---	---	28.5	23.5	26.0	25.0	22.0	23.0
25	28.0	24.0	26.0	30.5	25.5	---	28.5	24.5	26.5	---	---	---
26	28.5	24.5	26.5	31.0	26.0	28.5	30.0	25.0	27.0	---	---	---
27	29.5	25.5	27.0	30.5	27.0	28.5	29.5	26.0	27.5	---	---	---
28	29.0	26.0	27.0	28.5	26.5	27.5	29.5	26.0	28.0	---	---	---
29	28.5	25.5	26.5	27.5	26.0	27.0	28.0	26.0	27.0	19.0	18.0	---
30	27.0	25.0	26.0	30.0	26.0	28.0	28.5	25.5	27.0	20.0	17.5	18.5
31	---	---	---	30.5	26.5	28.5	29.5	26.0	27.5	---	---	---
MONTH	29.5	20.5	24.0	31.0	22.5	26.5	31.5	22.5	27.5	31.0	17.5	24.5

OXYGEN, DISSOLVED (DO), MG/L, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1							---	---	---	15.0	13.4	14.1
2							---	---	---	15.5	14.5	15.0
3							12.6	12.1	---	16.4	14.4	15.3
4							13.0	12.1	12.5	16.7	14.9	15.6
5							13.1	12.5	12.8	16.8	15.1	15.8
6							14.3	12.6	13.6	17.4	15.2	16.2
7							13.7	13.3	13.4	17.5	15.4	16.3
8							13.3	12.8	13.1	18.0	15.6	16.5
9							13.6	12.8	13.2	18.3	15.9	16.9
10							13.8	13.0	13.4	18.4	15.8	16.9
11							13.7	12.9	13.2	17.7	14.1	16.0
12							13.2	12.4	12.8	14.0	12.8	13.3
13							12.5	11.8	12.2	14.2	13.1	13.6
14							13.1	12.2	12.6	14.7	13.6	14.0
15							13.7	12.5	13.1	14.9	13.2	13.8
16							13.7	13.2	13.4	14.6	12.5	13.5
17							14.5	13.2	13.9	15.0	13.4	---
18							15.1	13.7	14.4	---	---	---
19							15.4	14.5	14.8	---	---	---
20							15.9	14.8	15.1	---	---	---
21							16.2	15.3	15.7	---	---	---
22							15.9	14.9	15.3	---	---	---
23							15.2	13.2	14.7	---	---	---
24							14.6	13.6	14.1	---	---	---
25							14.0	12.5	13.3	---	---	---
26							12.6	10.6	11.9	---	---	---
27							12.2	11.9	12.1	---	---	---
28							13.7	12.3	12.9	---	---	---
29							13.9	13.0	13.4	---	---	---
30							14.2	13.2	13.6	---	---	---
31							14.6	13.2	13.8	---	---	---
MONTH							16.2	10.6	13.5	18.4	12.5	15.2

01463500 DELAWARE RIVER AT TRENTON, NJ--Continued

OXYGEN, DISSOLVED (DO), MG/L, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	---	---	---	---	---	---	12.9	12.4	12.7	10.7	10.2	10.5
2	---	---	---	---	---	---	12.8	12.3	12.6	10.7	9.6	10.2
3	---	---	---	---	---	---	13.1	12.7	12.9	10.2	8.9	8.7
4	---	---	---	18.0	14.7	15.5	12.8	11.5	12.3	9.4	8.3	9.0
5	---	---	---	17.0	13.9	15.2	11.8	11.4	11.6	9.3	8.5	8.9
6	---	---	---	17.2	13.0	14.9	12.2	11.3	11.8	10.4	8.9	9.6
7	---	---	---	17.0	12.9	14.3	12.1	11.5	11.8	11.4	10.0	10.6
8	---	---	---	15.2	11.8	13.4	11.8	10.9	11.4	10.9	10.1	10.6
9	---	---	---	12.7	10.0	11.5	11.2	10.4	10.9	12.2	10.6	11.3
10	---	---	---	13.5	10.3	11.6	10.5	9.7	10.1	13.0	10.0	11.3
11	---	---	---	11.8	10.5	11.2	11.3	10.0	10.8	12.0	10.0	10.8
12	---	---	---	13.6	11.4	12.5	11.5	11.0	11.2	12.2	9.7	10.5
13	---	---	---	14.4	12.5	13.2	11.5	11.1	11.4	10.0	9.1	9.5
14	---	---	---	14.5	12.6	13.5	11.4	10.9	11.1	9.7	8.8	9.1
15	---	---	---	15.7	13.2	14.4	11.5	11.1	11.2	10.7	8.8	9.6
16	14.8	12.6	13.4	16.0	13.5	14.6	11.5	11.3	11.3	11.3	8.8	9.8
17	16.1	12.1	14.0	14.9	12.2	13.7	11.9	11.6	11.7	11.9	8.9	10.3
18	---	---	---	12.3	10.5	11.3	12.1	11.6	11.8	10.3	8.9	9.6
19	---	---	---	10.7	9.8	10.2	12.2	11.7	12.0	11.8	8.7	10.1
20	---	---	---	13.1	11.6	12.6	12.0	11.2	11.8	11.4	8.7	9.9
21	17.0	13.2	---	12.4	11.6	12.1	11.5	10.8	11.4	9.5	8.4	8.9
22	13.7	11.2	12.5	12.7	11.3	11.9	11.0	10.4	10.8	10.7	8.3	9.4
23	14.3	10.5	12.1	13.5	12.8	13.2	11.2	10.4	10.7	11.1	8.3	9.4
24	14.1	10.4	12.0	13.7	13.3	13.5	11.6	10.7	11.0	10.4	7.7	9.0
25	14.1	10.6	12.0	13.6	13.2	13.4	11.5	10.5	10.9	11.7	7.3	9.4
26	14.1	10.6	12.2	13.6	13.4	13.5	10.9	10.2	10.5	12.2	7.4	9.8
27	---	---	---	13.8	13.6	13.7	11.0	10.0	10.4	13.1	7.8	10.5
28	---	---	---	13.8	13.5	13.6	11.1	9.9	10.4	13.6	8.5	11.0
29	---	---	---	13.5	13.0	13.3	10.3	9.6	9.9	13.9	8.5	11.2
30	---	---	---	13.0	12.7	12.9	10.4	9.7	10.1	12.9	8.3	10.3
31	---	---	---	13.0	11.5	12.7	---	---	---	12.5	8.2	10.1
MONTH	17.0	10.4	12.6	18.0	9.8	13.1	13.1	9.6	11.3	13.9	7.3	10.0

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	13.1	7.9	10.4	---	---	---	13.1	7.0	9.8	9.6	5.9	7.5
2	9.9	7.4	8.7	---	---	---	14.0	6.8	10.1	9.5	5.6	7.3
3	10.5	6.2	7.8	---	---	---	14.2	6.6	9.9	9.5	5.7	7.4
4	9.1	6.2	7.5	---	---	---	12.2	6.4	9.0	10.1	6.3	7.9
5	8.9	6.0	7.3	---	---	---	9.6	5.9	---	9.3	6.4	7.5
6	9.8	6.7	8.0	---	---	---	---	---	---	10.0	6.2	7.9
7	10.3	6.7	8.3	---	---	---	---	---	---	10.0	6.4	8.0
8	9.5	6.8	8.1	11.2	7.4	9.1	---	---	---	13.9	7.2	10.1
9	---	---	---	12.5	7.6	9.8	---	---	---	14.5	8.3	11.0
10	---	---	---	11.8	7.1	9.4	---	---	---	12.0	7.6	9.6
11	---	---	---	11.9	6.9	9.1	---	---	---	10.7	7.6	9.0
12	---	---	---	11.8	6.8	9.3	---	---	---	10.3	7.6	8.7
13	---	---	---	12.7	7.2	9.7	13.6	9.4	---	10.3	7.0	8.4
14	---	---	---	12.9	7.2	9.8	13.9	7.3	10.2	9.4	6.7	7.9
15	---	---	---	12.9	7.4	10.0	12.7	7.2	9.3	8.3	6.2	7.2
16	---	---	---	12.9	7.1	9.1	---	---	---	9.0	6.4	7.5
17	11.2	7.0	9.0	11.3	6.2	8.3	---	---	---	8.6	6.7	7.5
18	11.4	7.2	9.4	11.4	6.3	8.8	---	---	---	7.4	6.1	6.8
19	---	---	---	12.0	6.4	9.0	---	---	---	8.6	6.7	7.5
20	---	---	---	13.0	6.4	9.4	---	---	---	9.0	6.4	7.4
21	---	---	---	13.4	6.5	9.7	---	---	---	9.3	6.2	7.4
22	---	---	---	13.6	6.2	9.1	---	---	---	9.5	5.9	7.3
23	---	---	---	9.4	5.6	7.1	11.8	6.8	9.0	9.1	5.5	7.1
24	---	---	---	10.9	5.8	8.1	12.2	6.8	9.1	9.6	5.7	7.4
25	14.2	8.1	11.2	13.6	6.2	9.6	11.7	6.6	8.9	---	---	---
26	14.2	8.1	11.2	14.2	7.2	10.3	12.2	6.5	8.9	---	---	---
27	14.2	7.8	10.8	14.1	7.1	10.2	11.6	6.2	8.5	---	---	---
28	13.3	7.3	10.2	12.2	7.1	9.5	10.9	6.4	8.2	---	---	---
29	12.3	6.7	9.0	10.0	6.9	8.3	9.5	6.1	7.4	11.9	9.2	---
30	10.2	6.2	8.0	12.9	6.8	9.5	9.7	6.0	7.6	12.2	8.4	9.9
31	---	---	---	13.3	7.1	9.8	9.6	6.1	7.6	---	---	---
MONTH	14.2	6.0	9.1	14.2	5.6	9.3	14.2	5.9	8.9	14.5	5.5	8.1

01463500 DELAWARE RIVER AT TRENTON, NJ--Continued

PHYTOPLANKTON ANALYSES, OCTOBER 1979 TO SEPTEMBER 1980

DATE	NOV 29,79		MAR 26,80		MAY 15,80		JUN 18,80	
TIME	1330		1200		1230		1200	
TOTAL CELLS/ML	9800		1000		2800		70000	
DIVERSITY: DIVISION	1.4		0.9		1.4		1.5	
.CLASS	1.4		0.9		1.4		1.5	
..ORDER	1.8		1.7		2.3		1.7	
...FAMILY	2.9		3.2		2.7		2.1	
....GENUS	3.3		3.6		2.9		2.6	
ORGANISM	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT
CHLOROPHYTA (GREEN ALGAE)								
.CHLOROPHYCEAE								
..CHLOROCOCCALES								
...COELASTRACEAE								
....COELASTRUM	--	-	--	-	--	-	--	-
...HYDRODICTYACEAE								
....PEDIASTRUM	--	-	--	-	--	-	--	-
...MICRACTINIACEAE								
....GOLENKINIA	--	-	--	-	*	0	*	0
....MICRACTINIUM	--	-	--	-	90	3	--	-
...OOCYSTACEAE								
....ANKISTRODESMUS	580	6	55	5	90	3	*	0
....CHLORELLA	58	1	--	-	--	-	1300	2
....CHODATELLA	--	-	--	-	*	0	970	1
....DICTYOSPHAERIUM	460	5	--	-	--	-	1300	2
....KIRCHNERIELLA	120	1	8	1	--	-	--	-
....OOCYSTIS	--	-	--	-	--	-	1300	2
....POLYEDRIOPSIS	--	-	--	-	--	-	*	0
....SELENASTRUM	--	-	--	-	*	0	3200	5
....TETRAEDRON	--	-	--	-	--	-	--	-
...SCENEDESMACEAE								
....CRUCIGENIA	--	-	--	-	--	-	--	-
....SCENEDESMUS	230	2	16	2	100	4	17000#	24
....TETRASTRUM	230	2	--	-	--	-	2600	4
..VOLVOCALES								
...CHLAMYDOMONADACEAE								
....CHLAMYDOMONAS	--	-	8	1	51	2	1600	2
CHRYSOPHYTA								
.BACILLARIOPHYCEAE								
..CENTRALES								
...COSCINODISCACEAE								
....CYCLOTELLA	520	5	250#	25	730#	27	11000#	15
....MELOSIRA	--	-	39	4	51	2	--	-
..PENNALES								
...ACHNANTHACEAE								
....ACHNANTHES	2300#	23	39	4	26	1	--	-
....COCCONEIS	58	1	24	2	*	0	--	-
...CYMBELLACEAE								
....CYMBELLA	810	8	79	8	26	1	--	-
...DIATOMACEAE								
....DIATOMA	--	-	63	6	26	1	--	-
...EUNOTIACEAE								
....EUNOTIA	120	1	8	1	--	-	--	-
...FRAGILARIACEAE								
....ASTERIONELLA	170	2	24	2	--	-	--	-
....FRAGILARIA	--	-	16	2	--	-	--	-
....SYNEDRA	230	2	120	12	*	0	--	-
...GOMPHONEMATACEAE								
....GOMPHONEMA	410	4	--	-	--	-	--	-
...MERIDIONACEAE								
....MERIDION	--	-	8	1	--	-	--	-
...NAVICULACEAE								
....NAVICULA	580	6	86	8	100	4	--	-
...NITZSCHIACEAE								
....NITZSCHIA	58	1	63	6	77	3	970	1
...SURIRELLACEAE								
....SURIRELLA	--	-	8	1	--	-	--	-
CYANOPHYTA (BLUE-GREEN ALGAE)								
.CYANOPHYCEAE								
..CHROOCOCCALES								
...CHROOCOCCACEAE								
....ANACYSTIS	120	1	--	-	820#	30	27000#	39
....COCCOCHLORIS	--	-	--	-	--	-	640	1
..HORMOGONALES								
...OSCILLATORIACEAE								
....OSCILLATORIA	2800#	28	100	10	490#	18	--	-
PYRRHOPHYTA (FIRE ALGAE)								
.DINOPHYCEAE								
..PERIDINIALES								
...PERIDINIACEAE								
....PERIDINIUM	--	-	8	1	--	-	--	-

01463500 DELAWARE RIVER AT TRENTON, NJ--Continued

PHYTOPLANKTON ANALYSES, OCTOBER 1979 TO SEPTEMBER 1980

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%
* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

DATE	JUL 24,80	AUG 12,80	SEP 16,80
TIME	1130	1100	1305
TOTAL CELLS/ML	82000	60000	8100
DIVERSITY: DIVISION	1.1	0.9	1.2
.CLASS	1.1	0.9	1.2
..ORDER	1.2	1.0	1.2
...FAMILY	1.7	2.0	2.1
....GENUS	1.8	2.6	2.2

ORGANISM	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT
CHLOROPHYTA (GREEN ALGAE)						
.CHLOROPHYCEAE						
..CHLOROCOCCALES						
...COELASTRACEAE						
....COELASTRUM	--	-	6100	10	--	-
...HYDRODICTYACEAE						
....PEDIASTRUM	--	-	--	-	67C	8
...MICRACTINIACEAE						
....GOLENKINIA	860	1	--	-	--	-
....MICRACTINIUM	--	-	--	-	--	-
...OOCYSTACEAE						
....ANKISTRODESMUS	4000	5	900	1	170	2
....CHLORELLA	--	-	--	-	--	-
....CHODATELLA	--	-	--	-	--	-
....DICTYOSPHAERIUM	--	-	13000#	21	--	-
....KIRCHNERIELLA	--	-	--	-	--	-
....OOCYSTIS	--	-	--	-	--	-
....POLYEDRIOPSIS	--	-	--	-	--	-
....SELENASTRUM	5700	7	4300	7	1200#	15
....TETRAEDRON	--	-	360	1	--	-
...SCENEDESMACEAE						
....CRUCIGENIA	--	-	1400	2	--	-
....SCENEDESMUS	34000#	42	17000#	27	3000#	38
....TETRASTRUM	--	-	720	1	--	-
..VOLVOCALES						
...CHLAMYDOMONADACEAE						
....CHLAMYDOMONAS	860	1	360	1	--	-
CHRYSOPHYTA						
.BACILLARIOPHYCEAE						
..CENTRALES						
...COSCINODISCACEAE						
....CYCLOTELLA	1100	1	360	1	--	-
....MELOSIRA	--	-	--	-	--	-
..PENNALES						
...ACHNANTHACEAE						
....ACHNANTHES	--	-	--	-	*	0
....COCCONEIS	--	-	--	-	--	-
...CYMBELLACEAE						
....CYMBELLA	--	-	--	-	--	-
...DIATOMACEAE						
....DIATOMA	--	-	--	-	--	-
...EUNOTIACEAE						
....EUNOTIA	--	-	--	-	--	-
...FRAGILARIACEAE						
....ASTERIONELLA	--	-	--	-	--	-
....FRAGILARIA	--	-	--	-	--	-
....SYNEDRA	--	-	--	-	--	-
...GOMPHONEMATACEAE						
....GOMPHONEMA	--	-	--	-	--	-
...MERIDIONACEAE						
....MERIDION	--	-	--	-	--	-
...NAVICULACEAE						
....NAVICULA	--	-	--	-	67	1
...NITZSCHIACEAE						
....NITZSCHIA	570	1	*	0	300	4
...SURIRELLACEAE						
....SURIRELLA	--	-	--	-	--	-
CYANOPHYTA (BLUE-GREEN ALGAE)						
.CYANOPHYCEAE						
..CHROOCOCCALES						
...CHROOCOCCACEAE						
....ANACYSTIS	34000#	42	16000#	27	2600#	32
....COCCOCHLORIS	--	-	--	-	--	-
..HORMOGONALES						
...OSCILLATORIACEAE						
....OSCILLATORIA	--	-	--	-	--	-

01463500 DELAWARE RIVER AT TRENTON, NJ--Continued

PHYTOPLANKTON ANALYSES, OCTOBER 1979 TO SEPTEMBER 1980

PYRRHOPHYTA (FIRE ALGAE)						
.DINOPHYCEAE						
..PERIDINIALES						
...PERIDINIACEAE						
....PERIDINIUM	--	-	--	-	--	-

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%
* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

01463500 DELAWARE RIVER AT TRENTON, NJ--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		OCTOBER			NOVEMBER			DECEMBER	
1	10000	16	432	7620	4	82	20200	8	436
2	18900	92	4690	7260	3	59	17200	10	464
3	20900	82	4630	10900	37	1090	15100	8	326
4	25200	69	4690	16200	45	1970	13800	6	224
5	23000	49	3040	21500	22	1280	13700	4	148
6	31800	89	7640	17400	14	658	12800	4	138
7	32900	58	5150	14900	6	241	12900	4	139
8	28900	36	2810	13300	5	180	11700	4	126
9	22300	17	1020	12100	4	131	10600	4	114
10	24400	17	1120	11500	5	155	9210	3	75
11	22900	14	866	11700	6	190	8550	4	92
12	19200	10	518	12900	8	279	8700	3	70
13	17500	9	425	11900	5	161	8870	4	96
14	15500	9	377	11200	5	151	10500	4	113
15	13600	8	294	10600	4	114	10100	3	82
16	11900	7	225	9710	4	105	9510	3	77
17	11900	8	257	9020	3	73	8810	4	95
18	11300	7	214	8680	2	47	8240	6	133
19	11100	7	210	8530	3	69	8130	5	110
20	10300	7	195	8600	3	70	7960	4	86
21	9680	6	157	8290	4	90	7700	3	62
22	8310	5	112	8030	4	87	7580	3	61
23	7810	6	127	7800	3	63	8120	2	44
24	8420	8	182	7110	3	58	7920	3	64
25	9790	8	211	6930	3	56	9410	6	152
26	9880	7	187	8130	8	176	14300	24	927
27	10000	5	135	30300	96	7850	17000	31	1420
28	9020	4	97	48700	175	23000	15600	10	421
29	8160	5	110	35200	107	10200	13600	7	257
30	7860	5	106	25600	52	3590	12100	4	131
31	7770	4	84	---	---	---	10700	3	87
TOTAL	480200	---	40311	421610	---	52275	350610	---	6770
		JANUARY			FEBRUARY			MARCH	
1	9930	3	80	4510	2	24	3900	3	32
2	10100	2	55	4000	2	22	3460	2	19
3	8880	1	24	3900	3	32	4090	2	22
4	9030	1	24	4000	3	32	3370	1	9.1
5	8640	1	23	4800	3	39	3760	3	30
6	7970	4	86	4200	3	34	4310	4	47
7	6870	2	37	4400	4	48	3950	5	53
8	6160	1	17	4500	4	49	3860	5	52
9	6500	1	18	4400	4	48	4630	33	413
10	6520	1	18	4330	3	35	5340	29	418
11	6360	6	103	4270	2	23	7110	24	461
12	10900	32	942	3980	2	21	7490	19	384
13	11200	15	454	3970	1	11	6240	8	135
14	8880	12	288	3760	2	20	6230	7	118
15	8520	3	69	3830	2	21	5340	7	101
16	8600	2	46	3970	3	32	6330	9	154
17	8270	2	45	4000	2	22	5950	16	257
18	7580	3	61	3650	2	20	14100	148	5630
19	9160	4	99	3480	3	28	23200	226	14200
20	8540	3	69	3670	2	20	27500	158	11700
21	7400	2	40	3780	3	31	29500	223	17800
22	6770	2	37	4300	4	46	69800	550	104000
23	6420	2	35	4850	5	65	88700	317	75900
24	6520	2	35	4990	6	81	52000	125	17600
25	6240	2	34	5380	5	73	46800	62	7830
26	5580	2	30	4720	4	51	40600	43	4710
27	5630	1	15	4140	4	45	34100	30	2760
28	5260	1	14	3670	3	30	26500	23	1650
29	5390	1	15	3640	3	29	25700	21	1460
30	4950	2	27	---	---	---	29200	19	1500
31	4720	2	25	---	---	---	35700	27	2600
TOTAL	233490	---	2865	121090	---	1032	628760	---	272045.1

01463500 DELAWARE RIVER AT TRENTON, NJ--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		APRIL			MAY			JUNE	
1	39400	26	2770	32900	42	3730	5070	6	82
2	37100	25	2500	27600	23	1710	5930	8	128
3	33500	22	1990	23500	14	888	5650	11	168
4	32700	23	2030	19900	11	591	7300	26	512
5	32400	22	1920	16800	9	408	7270	28	550
6	30200	17	1390	14800	7	280	6070	22	361
7	25600	14	968	14900	7	282	5390	18	262
8	21500	13	755	13600	7	257	5520	15	224
9	22700	28	1720	12400	7	234	5570	14	211
10	34900	46	4330	11300	6	183	5810	15	235
11	47800	62	8000	10600	5	143	5780	17	265
12	40600	30	3290	9930	5	134	5620	15	228
13	31900	20	1720	14800	61	2440	5560	11	165
14	28200	16	1220	14300	56	2160	5020	9	122
15	30600	18	1490	12000	14	454	4590	8	99
16	34800	25	2350	10900	6	177	4310	8	93
17	33000	30	2670	9730	5	131	4270	7	81
18	28300	21	1600	8810	7	167	4240	8	92
19	23900	11	710	8300	5	112	4320	9	105
20	20200	10	545	8180	6	133	4170	9	101
21	17600	12	570	8680	8	187	4080	9	99
22	16100	10	435	9440	11	280	4030	8	87
23	15300	8	330	8660	10	234	4000	8	86
24	13800	7	261	7780	7	147	4060	8	88
25	12800	6	207	7110	6	115	3900	7	74
26	11800	6	191	6550	7	124	3730	6	60
27	11300	5	153	5900	8	127	3650	8	79
28	13400	8	289	5530	6	90	3680	10	99
29	23100	25	1560	5160	6	84	3590	7	68
30	33800	45	4110	4840	8	105	4040	12	131
31	---	---	---	4620	6	75	---	---	---
TOTAL	798300	---	52074	369520	---	16182	146220	---	4955
		JULY			AUGUST			SEPTEMBER	
1	4550	22	270	3030	5	41	3050	7	58
2	5430	30	440	3230	7	61	3100	8	67
3	5710	28	432	3340	6	54	3040	9	74
4	4930	20	266	3660	5	49	2970	10	80
5	4570	15	185	4210	15	171	2930	8	63
6	4450	13	156	4470	27	326	2830	8	61
7	5030	23	312	4350	13	153	3040	9	74
8	4490	19	230	4070	9	99	2830	10	76
9	4570	16	197	3810	6	62	2970	9	72
10	4500	14	170	3630	6	59	2800	8	60
11	4200	12	136	3490	5	47	2740	7	52
12	4140	11	123	2950	5	40	2690	6	44
13	4310	10	116	2950	4	32	2660	4	29
14	3800	7	72	3130	11	93	2840	7	54
15	3710	7	70	3070	9	75	3220	10	87
16	3460	10	93	3050	7	58	3070	6	50
17	3840	9	93	3140	4	34	2870	4	31
18	3780	8	82	3080	4	33	3730	5	50
19	3710	7	70	2910	3	24	3660	4	40
20	3500	6	57	2730	4	29	3480	5	47
21	3200	6	52	2820	5	38	3280	4	35
22	3100	7	59	2500	2	13	3150	5	43
23	3260	10	88	2560	3	21	2800	4	30
24	4350	11	129	2650	5	36	2720	3	22
25	3930	9	95	2640	7	50	3070	4	33
26	3660	7	69	2650	5	36	2840	5	38
27	3380	7	64	2770	4	30	2770	3	22
28	3220	6	52	3080	4	33	2850	2	15
29	3150	6	51	3140	4	34	2800	2	15
30	3130	7	59	3000	6	49	2640	3	21
31	3200	6	52	3020	7	57	---	---	---
TOTAL	124260	---	4340	99130	---	1937	89440	---	1443
YEAR	3862630		456229.1						

01463568 ASSUNPINK CREEK AT CARSONS MILLS, NJ

LOCATION.--Lat 40°13'05", long 74°33'08", Mercer County, Hydrologic Unit 02040105, at bridge at Carsons Mills, 0.1 mi (0.2 km) upstream from New Sharon Branch, and 1.3 mi (2.0 km) northeast of Pages Corner.

DRAINAGE AREA.--12.5 mi^2 (32.4 km^2).

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1976 to current year.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH FIELD (UNITS)	TEMPERATURE, WATER (DEG C)	OXYGEN, DISSOLVED (MG/L)	OXYGEN DEMAND, BIOCHEM UNINHIB 5 DAY (MG/L)	COLIFORM, FECAL, EC BROTH (MPN)	STREPTOCOCCI FECAL (MPN)	HARDNESS (MG/L AS CACO3)
JAN 28...	1100	13	122	6.3	2.0	13.6	1.3	8	2	38
MAR 25...	1300	50	102	6.2	6.0	11.6	1.6	5	540	30
JUN 05...	0930	13	119	6.9	18.5	9.3	2.2	2400	49	39
JUL 15...	1300	13	122	7.6	25.0	10.4	1.7	80	80	42
AUG 07...	1030	15	113	7.0	24.5	9.8	2.8	--	--	41

DATE	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)
JAN 28...	8.0	4.3	4.1	2.3	10	0	8	27	9.5	.1
MAR 25...	6.5	3.4	3.7	2.1	5	0	4	23	8.3	.1
JUN 05...	8.0	4.5	3.9	1.8	12	0	10	23	8.7	.2
JUL 15...	8.7	5.0	3.9	2.2	18	0	15	22	10	.2
AUG 07...	8.5	4.8	4.0	2.3	20	0	16	19	8.9	.3

DATE	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, ORTHOPHOSPHATE TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
JAN 28...	6.4	64	1.4	E.060	--	.06	1.5	.11	3.4
MAR 25...	4.6	66	1.0	.090	1.5	1.6	2.6	.58	--
JUN 05...	4.6	90	1.0	.170	.74	.91	1.9	.09	3.6
JUL 15...	5.8	91	.85	.160	.46	.62	1.5	.31	3.8
AUG 07...	6.4	85	.50	.170	.38	.55	1.0	.28	6.4

01463620 ASSUNPINK CREEK NEAR CLARKSVILLE, NJ

LOCATION.--Lat 40°16'11", long 74°40'20", Mercer County, Hydrologic Unit 02040105, on left bank 200 ft (61 m) upstream from bridge on Quaker Bridge Road, 1.9 mi (3.1 km) south of Clarksville, 2.0 mi (3.2 km) upstream from Shipetaukin Creek, and 7.6 mi (12.2 km) upstream of mouth.

DRAINAGE AREA.--34.3 mi^2 (88.8 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Occasional low-flow measurements water years 1963-67. October 1972 to current year.

REVISED RECORDS.--WRD-NJ 1974: 1973(M). WDR-NJ-75-1: 1971(M).

GAGE.--Water-stage recorder. Datum of gage is 49.28 ft (15.021 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Water-discharge records good. Regulation from flood-control dams and ponds upstream.

AVERAGE DISCHARGE.--8 years, 56.2 ft^3/s (1.592 m^3/s), 22.25 in/yr (565 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,050 ft^3/s (29.7 m^3/s) July 21, 1975, gage height, 9.36 ft (2.853 m), from crest-stage gage; minimum, 5.7 ft^3/s (0.16 m^3/s) Sept. 11, 12, 13, 14, 1980, gage height, 3.78 ft (1.152 m).

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Aug. 28, 1971, reached a stage of 10.9 ft (3.32 m), discharge, 1,500 ft^3/s (42.5 m^3/s).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 147 ft^3/s (4.16 m^3/s) Apr. 1, gage height, 5.48 ft (1.670 m), no peaks above base of 200 ft^3/s (5.66 m^3/s); minimum, 5.7 ft^3/s (0.16 m^3/s) Sept. 11-14, gage height, 3.78 ft (1.152 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	98	35	56	46	35	38	135	92	28	18	35	12
2	110	35	53	44	32	41	135	89	28	19	34	21
3	111	40	50	43	31	41	135	84	26	20	33	20
4	106	46	48	41	30	42	135	79	27	21	32	19
5	97	49	46	40	29	42	133	72	26	20	34	18
6	89	49	44	38	28	42	128	66	25	22	35	17
7	82	48	46	38	26	42	122	63	24	21	30	16
8	76	47	47	38	26	30	102	61	23	20	28	15
9	71	45	47	37	25	32	85	61	21	19	25	6.3
10	87	45	46	35	25	34	114	57	24	19	24	6.1
11	108	45	45	35	25	42	124	54	25	18	22	5.9
12	98	52	43	57	25	48	122	52	24	17	27	5.7
13	91	56	44	69	25	49	119	57	24	16	25	5.7
14	88	59	47	68	25	52	115	61	22	15	25	6.0
15	82	60	48	67	24	63	116	60	22	14	24	9.3
16	77	57	48	62	26	69	114	57	22	16	23	9.4
17	69	55	47	58	28	68	119	53	21	24	22	9.2
18	64	52	46	56	28	71	128	52	19	23	20	12
19	60	50	45	61	28	70	122	50	19	19	19	13
20	56	49	43	64	28	67	115	48	18	15	19	13
21	53	47	43	62	28	78	107	48	17	15	17	12
22	50	45	42	60	30	97	100	49	17	22	17	11
23	47	43	43	57	36	101	92	47	16	28	16	11
24	45	43	45	54	38	101	84	45	16	26	15	11
25	43	42	51	52	40	111	76	43	15	23	15	9.9
26	41	47	56	49	39	114	69	40	15	22	15	10
27	40	57	57	47	39	110	65	36	15	21	14	10
28	39	61	55	44	47	104	69	34	15	22	14	10
29	39	61	52	42	45	105	78	32	15	26	14	10
30	38	59	51	39	---	109	87	31	17	33	13	10
31	37	---	48	38	---	118	---	30	---	35	13	---
TOTAL	2192	1479	1482	1541	891	2131	3245	1703	626	649	699	344.5
MEAN	70.7	49.3	47.8	49.7	30.7	68.7	108	54.9	20.9	20.9	22.5	11.5
MAX	111	61	57	69	47	118	135	92	28	35	35	21
MIN	37	35	42	35	24	30	65	30	15	14	13	5.7
CFSM	2.06	1.44	1.39	1.45	.90	2.00	3.15	1.60	.61	.61	.66	.34
IN.	2.38	1.60	1.61	1.67	.97	2.31	3.52	1.85	.68	.70	.76	.37

CAL YR 1979 TOTAL 28048.4 MEAN 76.8 MAX 832 MIN 8.0 CFSM 2.24 IN 30.42
WTR YR 1980 TOTAL 16982.5 MEAN 46.4 MAX 135 MIN 5.7 CFSM 1.35 IN 18.42

01463620 ASSUNPINK CREEK NEAR CLARKSVILLE, NJ--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1963, 1965, 1967, and 1979 to current year.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIOCHEM UNINHIB 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)	HARD-NESS (MG/L AS CACO3)
JAN 31...	1345	38	144	6.5	4.0	15.7	1.1	<2	<2	47
APR 07...	1330	122	107	6.7	13.0	12.0	1.5	2	11	30
JUN 02...	1300	28	125	7.2	23.5	9.6	2.2	79	170	36
JUL 15...	1030	15	130	7.6	26.0	8.4	2.9	20	<20	44
AUG 07...	1230	30	124	7.5	29.0	9.2	3.0	--	--	42

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)
JAN 31...	10	5.3	5.7	2.3	7	0	6	--	26	12
APR 07...	5.8	3.7	4.7	2.3	7	0	6	--	21	9.7
JUN 02...	7.4	4.2	5.2	2.2	20	0	16	.0	19	11
JUL 15...	9.0	5.2	5.2	2.5	29	0	24	--	16	12
AUG 07...	8.7	5.0	5.3	2.4	24	0	20	--	16	11

DATE	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, ORTHOPH OSPHATE TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
JAN 31...	.1	7.4	89	2.5	<.030	--	.03	2.5	.09	8.4
APR 07...	.1	4.6	46	1.5	.030	.45	.48	2.0	.22	2.7
JUN 02...	.2	2.2	89	1.4	.170	.55	.72	2.1	1.0	3.4
JUL 15...	.2	3.7	93	.62	.090	.53	.62	1.2	.28	4.0
AUG 07...	.2	3.7	83	.34	.100	.57	.67	1.0	.12	6.7

DATE	TIME	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE)	BORON, TOTAL RECOV-ERABLE (UG/L AS B)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)
JUN 02...	1300	20	1	0	70	0	10	2

DATE	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	PHENOLS (UG/L)
JUN 02...	820	0	100	.2	4	0	10	2

01464000 ASSUNPINK CREEK AT TRENTON, NJ

LOCATION.--Lat 40°13'27", long 74°44'58", Mercer County, Hydrologic Unit 02040105, on left bank at Chambers Street Bridge in Trenton, and 1.5 mi (2.4 km) upstream from mouth.

DRAINAGE AREA.--89.4 mi^2 (231.5 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1923 to current year.

GAGE.--Water-stage recorder. Concrete control since July 10, 1932. Datum of gage is 24.76 ft (7.547 m) National Geodetic Vertical Datum of 1929 (levels from New Jersey Geological Survey bench mark).

REMARKS.--Water-discharge records good. Records include water diverted from outside the basin since February 1954 for municipal supply which returns to Assunpink Creek through Ewing-Lawrence Sewerage Authority Treatment Plant, 2.4 mi (3.9 km) above station (records given herein). In addition there is an average inflow of about 2.0 ft^3/s (0.057 m^3/s) from industrial use of water that originates outside the basin. Some diversion for irrigation in headwater area during summer months.

AVERAGE DISCHARGE.--57 years, 129 ft^3/s (3.653 m^3/s), unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,450 ft^3/s (154 m^3/s) July 21, 1975, gage height, 14.61 ft (4.453 m), from high-water mark in gage house; minimum, 1.0 ft^3/s (0.028 m^3/s) Aug. 21, Oct. 22, 1931, gage height, 0.25 ft (0.076 m); minimum daily, 4.0 ft^3/s (0.11 m^3/s) July 21, Aug. 8, Sept. 2, 1929.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 900 ft^3/s (25.5 m^3/s) and maximum (*):

Date	Time	Discharge		Gage height		Date	Time	Discharge		Gage height	
		(ft^3/s)	(m^3/s)	(ft)	(m)			(ft^3/s)	(m^3/s)	(ft)	(m)
Oct. 1	1830	984	27.9	6.10	1.859	Mar. 31	1345	931	26.4	5.95	1.814
Mar. 21	1830	*1730	49.0	8.08	2.463	Apr. 9	1445	1100	31.2	6.43	1.960
Mar. 25	0400	963	27.3	6.04	1.841	Aug. 5	2100	1440	40.8	7.35	2.240

Minimum discharge, 20 ft^3/s (0.57 m^3/s) Sept. 13 14, gage height, 2.42 ft (0.738 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	582	95	128	104	89	63	803	221	69	59	51	27
2	460	94	120	101	82	70	511	196	72	55	40	31
3	329	225	113	98	78	70	379	176	76	54	40	31
4	251	156	111	93	79	70	539	160	69	49	40	31
5	236	131	107	92	78	73	431	150	66	54	315	31
6	204	123	110	88	76	73	337	140	65	60	261	40
7	167	119	146	89	75	74	305	133	62	47	69	29
8	150	112	122	90	75	84	276	178	65	45	55	30
9	160	108	108	88	73	102	600	145	64	45	47	31
10	594	125	107	85	73	99	721	127	75	42	41	30
11	432	146	105	161	79	275	390	118	67	41	41	30
12	313	291	100	414	75	152	328	155	63	38	157	29
13	283	178	144	215	72	126	300	314	62	34	63	26
14	238	182	163	183	71	252	311	182	58	35	58	26
15	214	157	127	170	71	244	347	148	56	36	56	135
16	194	145	115	154	96	215	285	132	64	66	51	44
17	175	133	119	141	86	209	259	119	59	72	46	38
18	162	124	106	159	81	325	269	124	57	52	48	196
19	150	121	103	302	79	203	255	125	56	43	46	54
20	141	116	101	191	76	173	239	112	56	39	45	42
21	132	113	99	166	72	823	224	151	49	40	45	40
22	128	105	102	159	103	691	206	138	46	95	42	47
23	123	102	113	166	137	385	189	118	47	109	39	49
24	131	99	128	143	113	304	173	106	48	50	34	45
25	115	95	207	131	112	648	157	98	46	42	36	56
26	108	282	183	120	112	371	143	89	46	38	37	52
27	101	243	151	112	94	305	163	84	49	34	35	43
28	110	175	135	110	82	273	322	80	45	35	33	34
29	108	152	125	105	77	450	280	76	44	123	33	35
30	101	138	117	98	---	446	223	74	85	61	30	37
31	98	---	111	93	---	655	---	73	---	56	28	---
TOTAL	6690	4385	3826	4421	2466	8303	9965	4242	1786	1649	1962	1369
MEAN	216	146	123	143	85.0	268	332	137	59.5	53.2	63.3	45.6
MAX	594	291	207	414	137	823	803	314	85	123	315	196
MIN	98	94	99	85	71	63	143	73	44	34	28	26
(†)	17.3	15.2	14.2	15.3	13.2	15.7	18.1	15.8	12.6	11.1	11.1	11.1

CAL YR 1979 TOTAL 80920 MEAN 222 MAX 2120 MIN 60 † 16.2
WTR YR 1980 TOTAL 51064 MEAN 140 MAX 823 MIN 26 † 14.2

† Inflow from outside the basin, 2.4 mi (3.9 km) upstream of station through plant of Ewing-Lawrence Sewerage Authority, in cubic feet per second.

01464500 CROSSWICKS CREEK AT EXTONVILLE, NJ

LOCATION.--Lat 40°08'15", long 74°36'02", Mercer County, Hydrologic Unit 02040201, on right bank upstream from highway bridge on Extonville, 0.5 mi (0.8 km) upstream from Pleasant Run, and 0.7 mi (1.1 km) downstream from Mercer-Monmouth County line.

DRAINAGE AREA.--83.6 mi^2 (216.5 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1940 to October 1951, October 1952 to current year.

REVISED RECORDS.--WDR NJ-79-2: 1971(M).

GAGE.--Water-stage recorder and concrete control. Datum of gage is 24.94 ft (7.602 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Water-discharge records good. Flow regulated occasionally by lakes above station.

AVERAGE DISCHARGE.--39 years (water years 1941-51, 1953-80), 136 ft^3/s (3.852 m^3/s), 22.09 in/yr (561 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,860 ft^3/s (138 m^3/s) Sept. 1, 1978, gage height, 14.18 ft (4.322 m); minimum 13.1 ft^3/s (0.37 m^3/s) Feb. 14, 1942 (result of freezeup); minimum daily, 16 ft^3/s (0.45 m^3/s) Aug. 30 to Sept. 3, Sept. 12, 1966.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 750 ft^3/s (21.2 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Apr. 1	2000	852	24.1	7.28	2.219
Apr. 10	1400	*1390	39.4	8.97	2.734

Minimum discharge, 29 ft^3/s (0.82 m^3/s) Sept. 11, 12, 13, gage height, 2.36 ft (0.719 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	143	81	118	95	81	72	749	221	71	87	74	35
2	272	81	110	93	76	72	656	186	68	65	63	33
3	165	158	103	92	81	72	362	162	82	96	53	33
4	127	308	100	89	89	73	337	142	100	92	52	32
5	111	184	97	90	91	79	473	120	82	68	51	33
6	139	133	98	95	95	89	295	110	70	78	143	35
7	127	116	138	90	90	89	201	104	67	67	107	35
8	106	107	132	97	80	96	162	111	67	56	67	33
9	96	101	111	97	74	116	256	126	66	54	54	31
10	217	99	103	89	76	109	1210	115	81	50	47	30
11	438	116	101	98	73	148	812	76	82	50	44	30
12	338	258	98	344	74	139	448	93	72	49	77	29
13	229	274	109	357	72	107	246	157	65	46	74	30
14	173	194	167	184	71	292	191	162	62	44	54	30
15	140	165	141	155	73	385	263	122	60	42	48	95
16	123	138	122	134	88	220	224	105	69	47	51	101
17	111	121	115	118	116	148	166	96	71	78	46	51
18	106	113	105	112	96	168	141	97	67	58	42	78
19	103	107	98	223	82	165	131	117	60	47	41	81
20	98	103	100	199	81	129	124	106	58	44	42	52
21	96	101	98	149	83	195	119	123	56	40	42	45
22	92	99	103	128	94	538	114	143	52	36	41	44
23	90	97	127	161	145	536	112	111	52	47	41	41
24	91	97	136	143	137	304	107	98	50	59	40	38
25	91	97	158	118	120	510	104	93	48	47	38	39
26	87	139	190	110	107	614	104	84	48	41	37	53
27	84	323	141	103	96	305	111	76	50	38	36	49
28	84	228	117	102	92	195	173	73	54	35	35	42
29	89	155	108	99	82	233	299	72	53	69	35	40
30	87	130	104	92	---	456	306	68	103	183	36	40
31	83	---	100	96	---	440	---	68	---	99	36	---
TOTAL	4336	4423	3648	4152	2615	7094	8996	3537	1986	1912	1647	1338
MEAN	140	147	118	134	90.2	229	300	114	66.2	61.7	53.1	44.6
MAX	438	323	190	357	145	614	1210	221	103	183	143	101
MIN	83	81	97	89	71	72	104	68	48	35	35	29
CFSM	1.68	1.76	1.41	1.60	1.08	2.74	3.59	1.36	.79	.74	.64	.53
IN.	1.93	1.97	1.62	1.85	1.16	3.16	4.00	1.57	.88	.85	.73	.60

CAL YR 1979 TOTAL 71167 MEAN 195 MAX 2990 MIN 56 CFSM 2.33 IN 31.67
WTR YR 1980 TOTAL 45684 MEAN 125 MAX 1210 MIN 29 CFSM 1.50 IN 20.33

01464500 CROSSWICKS CREEK AT EXTONVILLE, NJ--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1965 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: October 1966 to June 1970.
SUSPENDED-SEDIMENT DISCHARGE: February 1965 to June 1970.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPERATURE, WATER (DEG C)	OXYGEN, DISSOLVED (MG/L)	OXYGEN DEMAND, BIOCHEM UNINHIB 5 DAY (MG/L)	COLIFORM, FECAL, EC BROTH (MPN)	STREPTOCOCCI FECAL (MPN)	HARDNESS (MG/L AS CACO3)
JAN										
29...	1030	97	156	7.0	1.5	13.5	.9	20	50	47
APR										
08...	1000	163	118	7.2	12.0	10.8	1.5	14	49	41
MAY										
20...	0930	106	143	7.0	17.0	7.6	3.6	120	23	44
JUL										
02...	1200	66	150	7.1	22.0	6.0	3.2	200	200	45
AUG										
13...	1200	74	148	7.4	24.5	5.9	3.1	500	700	42

DATE	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)
JAN										
29...	14	2.9	7.2	2.4	29	0	24	23	12	.2
APR										
08...	12	2.6	4.5	2.2	20	0	16	20	8.8	.2
MAY										
20...	13	2.9	6.9	2.4	29	0	24	20	10	.2
JUL										
02...	14	2.5	5.8	3.0	32	0	26	20	10	.3
AUG										
13...	13	2.4	7.9	3.2	30	0	25	19	11	.3

DATE	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, ORTHOPHOSPHATE TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
JAN									
29...	9.8	88	1.1	E.600	--	1.3	2.4	.41	4.6
APR									
08...	7.5	94	1.2	.260	.73	.99	2.2	.50	5.9
MAY									
20...	9.3	99	1.3	.220	.42	.64	1.9	1.0	4.6
JUL									
02...	8.3	91	1.1	.300	.53	.83	1.9	1.2	3.5
AUG									
13...	10	105	.99	.180	1.0	1.2	2.2	1.0	7.5

01464505 CROSSWICKS CREEK AT GROVEVILLE, NJ

LOCATION.--Lat 40°10'26", long 74°40'48", Mercer County, Hydrologic Unit 02040201, at bridge on U.S. Route 130 in Groveville, 0.3 mi (0.5 km) upstream from Doctors Creek, and 0.6 mi (1.0 km) southwest of Yardville.

DRAINAGE AREA.--94.5 mi² (244.8 km²).

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1976 to current year.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIOCHEM UNINHIB 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)
OCT 10...	1300	162	7.0	11.0	9.4	4.2	5400	>24000	47	13
JAN 22...	1145	180	7.1	2.5	14.2	3.3	46	80	43	12
APR 10...	1015	88	6.6	12.5	8.3	2.6	>2400	>2400	25	6.3
MAY 29...	0930	180	6.9	17.5	8.4	3.8	1700	700	49	14
JUL 30...	1030	192	7.0	23.0	6.8	3.9	2400	24000	53	16
AUG 25...	0930	197	7.5	21.0	7.5	1.4	16000	400	57	17
SEP 30...	0930	209	7.5	15.5	8.1	3.8	170	400	60	18

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
OCT 10...	3.6	10	3.7	16	0	13	--	22	17	.2
JAN 22...	3.2	12	1.9	20	0	16	--	25	19	.2
APR 10...	2.2	3.4	2.8	10	0	8	--	16	6.7	.2
MAY 29...	3.5	14	2.4	24	0	20	.2	24	19	.2
JUL 30...	3.2	11	3.8	37	0	30	--	23	18	.4
AUG 25...	3.6	11	3.6	37	0	30	--	25	16	.4
SEP 30...	3.6	13	4.2	41	0	34	--	24	17	.4

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, ORTHOPH OSPHATE TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT 10...	8.8	103	<1.0	.580	.00	.58	--	.70	8.9
JAN 22...	8.9	119	1.2	E.300	--	E.93	--	.54	4.9
APR 10...	4.3	56	1.0	.120	--	E1.8	--	1.5	12
MAY 29...	10	119	1.6	.120	.71	.83	2.4	1.5	4.1
JUL 30...	10	108	1.1	.240	1.4	1.6	2.7	1.6	6.6
AUG 25...	12	116	2.1	.100	.84	.94	3.0	.92	6.2
SEP 30...	12	122	.20	.300	1.0	1.3	1.5	.43	6.7

01464505 CROSSWICKS CREEK AT GROVEVILLE, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	BORON, TOTAL RECOVERABLE (UG/L AS B)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)
MAY								
29...	0930	0	2	0	50	0	10	18

DATE	IRON, TOTAL RECOVERABLE (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	PHENOLS (UG/L)
MAY								
29...	8800	15	130	.1	7	0	50	0

01464515 DOCTORS CREEK AT ALLENTOWN, NJ

LOCATION.--Lat 40°10'37", long 74°35'57", Monmouth County, Hydrologic Unit 02040201, at bridge on Breza Road in Allentown, and 0.8 mi (1.3 km) downstream from Conines Millpond dam.

DRAINAGE AREA.--17.2 mi² (44.5 km²).

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1976 to current year.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPERATURE, WATER (DEG C)	OXYGEN, DISSOLVED (MG/L)	OXYGEN DEMAND, BIOCHEM UNINHIB 5 DAY (MG/L)	COLIFORM, FECAL, EC BROTH (MPN)	STREPTOCOCCI FECAL (MPN)	HARDNESS (MG/L AS CACO3)	CALCIUM DISSOLVED (MG/L AS CA)
JAN 28...	1400	161	6.9	2.5	14.4	1.0	70	49	53	12
MAR 25...	1030	117	6.7	6.0	10.9	1.7	1300	>2400	36	8.1
MAY 27...	1030	147	7.1	18.0	8.7	1.8	70	350	50	11
JUL 02...	1000	185	7.2	22.0	6.0	4.2	<200	210	57	13
AUG 13...	0915	157	7.3	24.5	6.5	1.8	1100	1100	55	13
SEP 23...	1230	200	7.2	21.5	6.4	3.7	1300	1100	60	15

DATE	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)
JAN 28...	5.5	5.9	2.7	20	0	16	--	26	14	.2
MAR 25...	3.9	4.2	2.8	10	0	8	--	22	10	.2
MAY 27...	5.4	5.5	2.2	34	0	28	--	18	11	.3
JUL 02...	6.0	7.2	3.7	41	0	34	--	23	16	.3
AUG 13...	5.4	5.2	3.3	44	0	36	--	17	13	.3
SEP 23...	5.5	8.3	4.9	51	0	42	.0	22	16	.3

DATE	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, ORTHOPHOSPHATE TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
JAN 28...	8.2	87	1.9	.440	.10	.54	2.3	.31	3.4
MAR 25...	4.9	76	1.5	.220	2.4	2.6	4.1	1.8	--
MAY 27...	4.4	87	.85	.440	.76	1.2	2.0	.41	7.1
JUL 02...	6.0	115	.86	.910	.59	1.5	2.4	2.7	4.5
AUG 13...	6.9	106	.20	.260	.74	1.0	1.2	.49	5.0
SEP 23...	9.7	128	.46	1.100	1.5	2.6	3.1	1.3	5.9

DATE	TIME	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	BORON, TOTAL RECOVERABLE (UG/L AS B)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)
SEP 23...	1230	20	2	0	50	0	20	5

01464515 DOCTORS CREEK AT ALLENTOWN, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	PHENOLS (UG/L)
SEP								
23...	1400	3	230	.1	4	0	20	4

01464522 DOCTORS CREEK AT ROUTE 130 NEAR YARDVILLE, NJ

LOCATION.--Lat 40°10'31", long 74°40'33", Mercer County, Hydrologic Unit 02040201, at bridge on U.S. Route 130, 0.3 mi (0.5 km) upstream from mouth, 0.4 mi (0.7 km) northwest of Groveville, 0.6 mi (1.0 km) southwest of Yardville, and 2.5 mi (4.0 km) southwest of Haines Corner.

DRAINAGE AREA.--25.8 mi² (66.8 km²).

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1976 to current year.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIOCHEM UNINHIB 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)
JAN										
22...	1430	195	6.9	2.5	14.1	3.4	5	23	54	12
APR										
10...	1300	90	6.6	14.5	8.8	2.5	920	>2400	25	5.9
MAY										
29...	1130	189	7.2	18.5	8.4	8.4	130	490	56	12
JUL										
30...	1200	182	7.5	24.0	7.2	3.0	3500	1700	56	13
AUG										
25...	1200	271	7.4	22.5	7.5	>8.1	3500	50	65	15
SEP										
30...	1300	262	7.2	17.0	8.1	>8.2	220	110	66	16

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
JAN										
22...	5.8	9.4	2.3	20	0	16	--	30	18	.2
APR										
10...	2.6	3.3	2.7	7	0	6	--	15	7.1	.2
MAY										
29...	6.2	9.9	2.7	34	0	28	.3	24	17	.3
JUL										
30...	5.8	7.5	3.1	41	0	34	--	18	16	.3
AUG										
25...	6.8	6.7	5.2	63	0	52	--	25	24	.4
SEP										
30...	6.4	15	6.0	54	0	44	--	26	26	.4

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 1[illegible] DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, ORTHOPH OSPHATE TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
JAN									
22...	8.1	121	1.2	E.640	--	E.72	--	.72	3.7
APR									
10...	3.4	58	1.3	.150	--	E1.6	--	1.1	12
MAY									
29...	5.7	117	1.9	1.200	.80	2.0	3.9	.60	6.5
JUL									
30...	5.3	99	.87	.800	1.2	2.0	2.9	.92	5.5
AUG									
25...	7.8	132	1.9	3.300	2.3	5.6	7.5	3.5	12
SEP									
30...	8.4	147	2.0	2.500	2.0	4.5	6.5	2.5	13

DATE	TIME	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE)	BORON, TOTAL RECOV-ERABLE (UG/L AS B)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)
MAY								
29...	1130	10	1	0	90	0	<10	10

01464522 DOCTORS CREEK AT ROUTE 130 NEAR YARDVILLE, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBE 1979 TO SEPTEMBER 1980

DATE	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	PHENOLS (UG/L)
MAY								
29...	1200	2	80	.2	5	0	20	3

01464531 BLACKS CREEK AT BORDENTOWN, NJ

LOCATION.--Lat 40°08'14", long 74°42'42", Burlington County, Hydrologic Unit 02040201, at bridge on U.S. Route 130 in Bordentown, 1.0 mi (1.6 km) northeast of Fieldsboro, 1.3 mi (2.1 km) upstream of mouth, and 3.1 mi (4.9 km) southwest of Groveville.

DRAINAGE AREA.--14.5 mi² (37.6 km²).

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1976 to current year.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH FIELD (UNITS)	TEMPERATURE, WATER (DEG C)	OXYGEN, DISSOLVED (MG/L)	OXYGEN DEMAND, BIOCHEM UNINHIB 5 DAY (MG/L)	COLIFORM, FECAL, EC BROTH (MPN)	STREPTOCOCCI FECAL (MPN)	HARDNESS (MG/L AS CACO3)	CALCIUM DISSOLVED (MG/L AS CA)
OCT 01...	1100	177	7.3	17.5	8.2	1.5	500	<20	58	15
JAN 29...	1300	205	7.0	2.0	13.4	1.1	<20	79	61	15
APR 08...	1300	184	6.8	12.5	10.8	1.3	5	33	58	14
MAY 20...	1130	189	6.9	16.5	8.8	3.7	50	170	54	13
JUL 30...	1330	195	7.2	24.0	7.0	3.5	170	80	58	16
AUG 20...	1230	226	7.1	22.0	7.0	5.0	<20	40	62	17
SEP 29...	1330	247	7.2	16.0	--	5.8	4	<2	66	19

DATE	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)
OCT 01...	4.9	6.0	5.1	33	0	27	22	15	.3
JAN 29...	5.6	11	3.8	15	0	12	34	18	.2
APR 08...	5.6	7.7	3.5	15	0	12	32	15	.2
MAY 20...	5.3	9.7	3.8	29	0	24	28	17	.3
JUL 30...	4.5	8.1	5.3	34	0	28	24	16	.3
AUG 20...	4.8	11	5.0	39	0	32	28	19	.3
SEP 29...	4.4	14	6.1	44	0	36	27	21	.3

DATE	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, ORTHOPHOSPHATE TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT 01...	13	100	1.3	1.000	.10	1.1	2.4	1.0	6.0
JAN 29...	12	118	2.2	E.810	--	1.8	4.0	1.4	8.4
APR 08...	10	127	2.5	.470	.73	1.2	3.7	1.4	3.9
MAY 20...	12	127	2.2	.360	.94	1.3	3.5	1.5	14
JUL 30...	12	120	1.9	.420	1.6	2.0	3.9	1.4	6.0
AUG 20...	13	138	2.5	.340	2.0	2.3	4.8	3.2	8.6
SEP 29...	13	150	3.4	1.800	3.1	4.9	8.3	3.6	--

01464540 CRAFTS CREEK AT HEDDING, NJ

LOCATION.--Lat 40°06'01", long 74°45'23", Burlington County, Hydrologic Unit 02040201, at bridge on Old York Road in Hedding, 1.6 mi (2.6 km) southeast of Roebling, and 2.2 mi (3.5 km) upstream from mouth.

DRAINAGE AREA.--10.6 mi² (27.5 km²).

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1959-63, 1976 to current year.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH FIELD (UNITS)	TEMPERATURE, WATER (DEG C)	OXYGEN, DISSOLVED (MG/L)	OXYGEN DEMAND, BIOCHEM UNINHIB 5 DAY (MG/L)	COLIFORM, FECAL, EC BROTH (MPN)	STREPTOCOCCI FECAL (MPN)	HARDNESS (MG/L AS CACO3)	CALCIUM DISSOLVED (MG/L AS CA)
OCT 02...	1415	192	7.0	18.0	7.8	2.2	35000	24000	53	11
JAN 30...	1030	280	6.6	.0	14.2	.2	2	<2	74	15
APR 16...	1230	200	6.7	11.5	10.9	.7	920	540	54	11
MAY 22...	1200	223	7.0	16.0	9.6	1.3	2400	460	55	11
JUL 17...	1215	199	6.9	25.5	6.7	3.9	11000	3500	53	11
AUG 18...	1200	236	--	21.5	7.0	2.7	1100	1300	63	14
SEP 24...	1300	236	7.1	20.5	7.2	1.0	1400	490	62	14

DATE	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)
OCT 02...	6.3	11	5.7	22	0	18	29	23	.2
JAN 30...	8.8	18	3.1	10	0	8	39	41	.2
APR 16...	6.4	12	3.2	12	0	10	32	25	.2
MAY 22...	6.6	17	3.2	22	0	18	30	30	.2
JUL 17...	6.1	13	4.5	20	0	16	31	25	.2
AUG 18...	6.7	14	5.1	--	--	--	35	29	.2
SEP 24...	6.5	12	7.2	22	0	18	39	27	.2

DATE	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, ORTHOPHOSPHATE TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT 02...	11	128	<1.0	.400	.47	.87	--	.40	8.4
JAN 30...	11	152	2.7	.170	.31	.48	3.2	.01	1.8
APR 16...	8.3	137	2.2	.320	.49	.81	3.0	.77	5.8
MAY 22...	9.6	163	1.6	.160	.63	.79	2.4	.06	4.4
JUL 17...	6.3	133	.63	.210	.89	1.1	1.7	.34	--
AUG 18...	9.8	152	.85	.300	.43	.73	1.6	.15	2.7
SEP 24...	8.7	153	1.3	.170	.32	.49	1.8	.12	5.7

01464580 ASSISCUNK CREEK AT COLUMBUS, NJ

LOCATION.--Lat 40°03'25", long 74°43'27", Burlington County, Hydrologic Unit 02040201, at bridge on U.S. Route 206, 1.1 mi (1.8 km) south of Columbus, 1.2 mi (1.9 km) downstream of Annaricken Brook, and 2.1 mi (3.4 km) northwest of Jobstown.

DRAINAGE AREA.--8.28 mi² (21.45 km²).

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1958-63, 1976 to current year.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH FIELD (UNITS)	TEMPERATURE, WATER (DEG C)	OXYGEN, DISSOLVED (MG/L)	OXYGEN DEMAND, BIOCHEM UNINHIB 5 DAY (MG/L)	COLIFORM, FECAL, EC BROTH (MPN)	STREPTOCOCCI FECAL (MPN)	HARDNESS (MG/L AS CACO3)	CALCIUM DISSOLVED (MG/L AS CA)
OCT 02...	1215	147	6.7	17.5	7.4	2.3	1400	5400	44	11
FEB 06...	1300	183	6.5	1.5	13.2	1.6	2	221	50	13
APR 09...	1300	105	6.7	12.0	9.2	5.4	>2400	>2400	32	7.9
JUN 03...	1230	163	6.3	18.5	6.4	1.2	700	1100	45	11
JUL 16...	1230	170	6.0	19.5	5.6	1.0	800	1300	46	11
AUG 19...	1330	185	6.1	17.5	5.6	1.4	500	800	53	13

DATE	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)
OCT 02...	4.0	3.7	7.1	18	0	15	.0	30	8.7	.2
FEB 06...	4.3	5.4	4.1	17	0	14	--	42	12	.3
APR 09...	3.0	3.2	4.6	20	0	16	--	19	6.2	.2
JUN 03...	4.2	6.2	4.5	12	0	10	--	36	12	.4
JUL 16...	4.6	5.8	5.1	10	0	8	--	44	13	.3
AUG 19...	5.0	5.7	5.1	13	0	11	--	42	14	.3

DATE	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, ORTHOPHOSPHATE TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT 02...	17	114	<1.0	.300	1.1	1.4	--	.57	9.8
FEB 06...	17	105	1.0	.080	.46	.54	1.5	.04	1.9
APR 09...	7.2	80	.75	.130	2.1	2.2	3.0	3.0	13
JUN 03...	17	127	.92	.580	.10	.68	1.6	.53	5.1
JUL 16...	14	123	.45	.110	.45	.56	1.0	.28	1.4
AUG 19...	16	137	.73	.260	.50	.76	1.5	.52	.9

DATE	TIME	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	BORON, TOTAL RECOVERABLE (UG/L AS B)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)
OCT 02...	1215	50	1	0	60	0	10	3

01464580 ASSISCUNK CREEK AT COLUMBUS, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	PHENOLS (UG/L)
OCT								
02...	3700	5	100	<.5	5	0	70	2

01464590 ASSISCUNK CREEK NEAR BURLINGTON, NJ

LOCATION.--Lat 40°04'19", long 74°47'57", Burlington County, Hydrologic Unit 02040201, at bridge on Old York Road, 1.4 mi (2.3 km) southwest of Bustleton, 2.8 mi (4.5 km) northeast of Deacons, 3.2 mi (5.1 km) east of Burlington, and 4.2 mi (6.8 km) upstream from mouth.

DRAINAGE AREA.--37.2 mi^2 (96.4 km^2).

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1976 to current year.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH FIELD (UNITS)	TEMPERATURE, WATER (DEG C)	OXYGEN, DISSOLVED (MG/L)	OXYGEN DEMAND, BIOCHEM UNINHIB 5 DAY (MG/L)	COLIFORM, FECAL, EC BROTH (MPN)	STREPTOCOCCI FECAL (MPN)	HARDNESS (MG/L AS CACO3)	CALCIUM DISSOLVED (MG/L AS CA)
OCT 09...	1100	162	7.1	13.0	9.2	.7	490	<200	51	12
JAN 30...	1300	174	6.6	.5	15.1	.1	8	11	56	13
APR 16...	1000	124	6.7	12.0	9.6	.3	1600	280	39	8.9
MAY 22...	1000	150	6.9	15.5	8.7	2.1	5400	>2400	48	11
JUL 17...	1100	170	6.7	24.0	3.4	2.7	9200	3500	53	12
AUG 18...	1000	195	7.3	21.0	6.7	2.1	1100	490	63	15
SEP 24...	1015	235	7.0	19.5	6.6	.9	1300	790	73	18

DATE	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)
OCT 09...	5.2	5.8	4.5	22	0	18	--	30	13	.2
JAN 30...	5.7	6.1	2.9	10	0	8	--	35	13	.2
APR 16...	4.1	4.4	3.1	15	0	12	--	26	9.9	.2
MAY 22...	5.0	6.1	3.4	22	0	18	.0	26	12	.3
JUL 17...	5.7	6.6	4.6	24	0	20	--	29	15	.3
AUG 18...	6.1	6.8	5.2	26	0	21	--	37	16	.3
SEP 24...	6.9	7.7	6.8	15	0	12	--	57	17	.2

DATE	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, ORTHOPHOSPHATE TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT 09...	16	106	<1.0	.200	.31	.51	--	.22	4.1
JAN 30...	15	111	1.5	.110	.00	.11	1.6	.15	3.6
APR 16...	9.0	96	1.0	.130	.68	.81	1.8	1.2	8.8
MAY 22...	12	115	1.0	.160	.62	.78	1.8	1.3	--
JUL 17...	10	111	.66	.200	.80	1.0	1.7	.21	6.1
AUG 18...	12	142	.67	.030	.58	.61	1.3	.24	3.7
SEP 24...	13	162	.68	.150	.34	.49	1.2	.18	6.1

01464590 ASSISCUNK CREEK NEAR BURLINGTON, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	NITROGEN, NH4 + ORG. TOT IN BOT MAT (MG/KG AS N)	CARBON, INORGANIC, TOT IN BOT MAT (G/KG AS C)	CARBON, INORG + ORGANIC TOT. IN BOT MAT (G/KG AS C)	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC TOTAL IN BOTTOM MATERIAL (UG/G AS AS)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	BORON, TOTAL RECOVERABLE (UG/L AS B)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM RECOV. FM BOTTOM MATERIAL (UG/G AS CD)
OCT											
09...	1100	2300	.9	16	--	--	0	--	--	--	<10
MAY											
22...	1000	--	--	--	10	1	--	0	50	0	--

DATE	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, RECOV. FM BOTTOM MATERIAL (UG/G)	COBALT, RECOV. FM BOTTOM MATERIAL (UG/G AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, RECOV. FM BOTTOM MATERIAL (UG/G AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, RECOV. FM BOTTOM MATERIAL (UG/G AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, RECOV. FM BOTTOM MATERIAL (UG/G AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)
OCT										
09...	--	20	<10	--	<10	--	23000	--	1100	--
MAY										
22...	10	--	--	2	--	4800	--	3	--	210

DATE	MANGANESE, RECOV. FM BOTTOM MATERIAL (UG/G)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MERCURY RECOV. FM BOTTOM MATERIAL (UG/G AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	NICKEL, RECOV. FM BOTTOM MATERIAL (UG/G AS NI)	SELENIUM, TOTAL (UG/L AS SE)	SELENIUM, TOTAL IN BOTTOM MATERIAL (UG/G)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, RECOV. FM BOTTOM MATERIAL (UG/G AS ZN)	PHENOLS (UG/L)
OCT										
09...	360	--	.00	--	10	--	0	--	50	--
MAY										
22...	--	.3	--	6	--	0	--	10	--	1

DATE	PCB, TOTAL IN BOTTOM MATERIAL (UG/KG)	ALDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	CHLORDANE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDD, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDT, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIAZINON, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIELDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ENDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ETHION, TOTAL IN BOTTOM MATERIAL (UG/KG)
OCT										
09...	10	.0	10	23	30	17	.0	2.2	.0	.0
MAY										
22...	--	--	--	--	--	--	--	--	--	--

DATE	HEPTACHLOR, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)	LINDANE TOTAL IN BOTTOM MATERIAL (UG/KG)	MALATHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	METHOXYCHLOR, TOT. IN BOTTOM MATL. (UG/KG)	METHYL PARATHION, TOT. IN BOTTOM MATL. (UG/KG)	METHYL TRITHION, TOT. IN BOTTOM MATL. (UG/KG)	PARATHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	TOXAPHENE, TOTAL IN BOTTOM MATERIAL (UG/KG)	TRITHION, TOTAL IN BOTTOM MATERIAL (UG/KG)
OCT										
09...	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
MAY										
22...	--	--	--	--	--	--	--	--	--	--

01464598 DELAWARE RIVER AT BURLINGTON, NJ

LOCATION.--Lat 40°04'42", long 74°52'28", Burlington County, Hydrologic Unit 02040201, on left bank at the intake canal of the Public Service Electric and Gas Company, 0.3 mi (0.5 km) downstream from Burlington-Bristol Bridge, 1.4 mi (2.3 km) downstream from Assiscunk Creek, and at channel mile 117.40 (188.89 km).

DRAINAGE AREA.--7,160 mi^2 (18,540 km^2).

PERIOD OF RECORD.--
TIDE ELEVATIONS: July 1964 to current year. March 1921 to July 1926, January 1931 to November 1939, August 1951 to June 1954, July 1957 to June 1964, in files of Philadelphia District Corps of Engineers.

REVISED RECORDS.--WDR NJ-76-1: 1973(m).

GAGE.--Water-stage recorder. Datum of gage is -12.90 ft (-3.932 m) National Geodetic Vertical Datum of 1929. Prior to May 20, 1971, water-stage recorder at site 0.8 mi (1.3 km) upstream at same datum. Gage-height record converted to elevation above or below (-) National Geodetic Vertical Datum of 1929 for publication.

REMARKS.--Summaries for months with short periods of no gage-height record have been estimated with negligible or no loss of accuracy unless otherwise noted. Some periods cannot be estimated and are noted by dash (--) lines.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 8.58 ft (2.615 m) June 30, 1973; minimum, -6.60 ft (-2.012 m) Feb. 26, 1967.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum elevation known, 10.8 ft (3.29 m) Aug. 20, 1955, from high-water mark at site 1.4 mi (2.3 km) upstream; minimum, -9.1 ft (-2.77 m) Dec. 31, 1962, at present site.

EXTREMES FOR CURRENT YEAR.--Maximum elevation recorded, 6.64 ft (2.024 m) Oct. 5; minimum recorded, -5.28 ft (-1.609 m) Dec. 17.

Summaries of tide elevations during current year are as follows:

TIDE ELEVATIONS, IN FEET, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

		OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
Maximum	Elevation	6.64	6.61	5.69	--	--	--	--	--	--	--	--	6.17
high tide	Date	5	26	20	--	--	--	--	--	--	--	--	25
Minimum	Elevation	-3.46	-4.29	-5.28	--	--	--	--	--	--	--	--	-3.75
low tide	Date	10	16	17	--	--	--	--	--	--	--	--	3
Mean high tide		5.20	4.90	4.08	--	--	--	--	--	--	--	--	4.74
Mean water level		1.52	1.28	0.52	--	--	--	--	--	--	--	--	1.08
Mean low tide		-2.32	-2.54	-3.00	--	--	--	--	--	--	--	--	-2.76

NOTE.--Missing or doubtful record on Jan. 2, to Sept. 1, Sept. 26-30.

01464600 DELAWARE RIVER AT BRISTOL, PA-BURLINGTON, NJ BRIDGE

LOCATION.--Lat 40°04'55", long 74°51'58", Bucks County, Hydrologic Unit 02040201, at center of river 1,300 ft (396 m) upstream from bridge on a line from the Pennsylvania bank through channel station -79.2 to Lehigh range light on New Jersey bank.

DRAINAGE AREA.--7,163 mi² (18,508 km²).

WATER-QUALITY DATA

PERIOD OF RECORD.--August 1949 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1967 to September 1975, July 1978 to current year.
pH: October 1967 to September 1975, July 1978 to current year.
WATER TEMPERATURES: October 1954 to September 1975, July 1978 to current year.
DISSOLVED OXYGEN: October 1961 to September 1975, July 1978 to current year.

REMARKS.--Further information on this station is given in U.S. Geological Survey Water-Supply Paper 1809-0.

EXTREMES FOR PERIOD OF RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 397 micromhos Nov. 1, 1970; minimum, 54 micromhos June 5, 1968.
pH: Maximum, 9.2 Sept. 28, 29, 1978; minimum, 3.9 Sept. 2, 1978.
WATER TEMPERATURES: Maximum, 31.0°C July 9, 1966; minimum, freezing point on many days during winter months.
DISSOLVED OXYGEN: Maximum, 16.0 mg/L Jan. 12, 1974; minimum, 0.0 on several days during 1963, 1965, and 1967.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	19.5	19.0	19.0	---	---	---	9.5	7.5	8.5	5.5	5.0	5.0
2	19.5	19.0	19.5	---	---	---	8.0	6.5	7.0	5.0	5.0	5.0
3	19.5	18.5	19.0	---	---	---	7.0	5.5	6.5	5.0	4.5	5.0
4	19.0	18.0	18.5	---	---	---	6.0	5.0	5.5	5.0	4.0	4.5
5	18.5	18.0	18.5	---	---	---	6.0	5.0	5.5	4.0	3.5	4.0
6	18.0	16.5	17.5	---	---	---	6.0	5.0	5.5	4.0	3.0	3.5
7	17.0	15.5	16.5	---	---	---	6.5	5.0	5.5	3.5	3.0	3.5
8	15.5	14.5	15.5	---	---	---	6.0	5.0	5.5	3.5	3.0	3.0
9	15.0	14.5	14.5	---	---	---	6.0	5.5	6.0	3.0	3.0	3.0
10	14.5	13.5	14.0	---	---	---	6.5	5.5	6.0	3.0	2.5	3.0
11	13.5	12.0	13.0	---	---	---	6.5	5.5	6.0	3.5	2.5	3.0
12	12.5	11.5	12.0	---	---	---	7.0	6.0	6.5	4.0	3.5	4.0
13	12.0	11.5	12.0	---	---	---	7.0	6.5	6.5	4.5	3.5	4.0
14	11.5	11.5	11.5	---	---	---	7.5	6.5	6.5	4.5	4.0	4.5
15	12.0	11.5	11.5	11.0	10.5	10.5	7.0	6.5	7.0	5.0	4.0	4.5
16	12.0	11.5	11.5	11.0	9.5	10.5	7.0	6.5	6.5	5.0	4.0	4.5
17	12.5	12.0	12.0	10.5	9.5	9.5	7.0	5.5	6.0	5.0	4.5	4.5
18	13.0	12.0	12.5	10.0	9.0	9.5	6.0	4.5	5.5	5.5	4.5	5.0
19	12.5	12.5	12.5	9.5	9.0	9.5	5.5	3.5	5.0	6.0	5.0	5.5
20	---	---	---	10.0	9.0	9.5	4.5	3.0	4.0	6.0	5.5	5.5
21	---	---	---	10.0	9.0	9.5	4.0	2.5	3.5	5.5	5.0	5.5
22	---	---	---	10.0	9.5	9.5	3.5	2.5	3.0	5.5	5.0	5.0
23	---	---	---	10.5	9.5	10.0	3.5	2.5	3.0	5.5	5.0	5.0
24	---	---	---	11.0	10.0	10.5	3.5	3.0	3.5	5.0	4.0	4.5
25	---	---	---	11.5	10.5	11.0	4.0	3.5	3.5	4.5	4.0	4.0
26	---	---	---	12.0	11.0	11.5	---	---	---	4.5	4.0	4.0
27	---	---	---	13.5	12.0	13.0	7.0	6.0	6.5	4.0	3.5	3.5
28	---	---	---	14.0	12.0	13.5	6.5	6.0	6.0	4.0	3.5	3.5
29	---	---	---	12.0	10.5	11.0	6.0	5.5	5.5	3.5	3.0	3.5
30	---	---	---	10.5	8.5	9.5	5.5	5.0	5.5	3.0	2.5	3.0
31	---	---	---	---	---	---	5.5	5.0	5.0	3.0	2.0	2.5
MONTH	19.5	11.5	15.0	14.0	8.5	10.5	9.5	2.5	5.5	6.0	2.0	4.0

01464600 DELAWARE RIVER AT BRISTOL, PA-BURLINGTON, NJ BRIDGE--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	2.5	2.0	2.5	5.0	4.5	4.5	7.5	6.5	7.5	12.5	11.5	12.0
2	2.0	1.5	2.0	4.5	4.0	4.0	8.0	7.0	7.5	13.5	12.0	12.5
3	2.0	1.5	1.5	4.0	3.5	3.5	8.5	7.5	8.0	15.0	13.0	14.0
4	1.5	1.5	1.5	4.0	3.5	4.0	9.0	8.0	8.5	16.0	14.5	15.5
5	1.5	1.0	1.5	4.0	3.5	4.0	10.0	8.5	9.0	17.0	16.0	16.5
6	1.5	1.0	1.5	4.5	3.5	4.0	10.0	9.0	9.5	17.5	16.5	17.0
7	2.0	1.0	1.5	4.5	4.0	4.0	10.5	9.5	10.0	18.0	17.5	17.5
8	2.0	1.0	1.5	4.5	4.0	4.0	11.0	10.0	10.5	---	---	---
9	2.5	1.5	2.0	---	---	---	11.5	11.0	11.0	---	---	---
10	2.5	1.5	2.0	---	---	---	13.0	11.5	12.0	---	---	---
11	2.5	2.0	2.5	---	---	---	13.0	12.0	12.5	---	---	---
12	2.5	2.0	2.5	9.0	7.0	8.0	12.5	11.5	12.0	---	---	---
13	2.5	2.0	2.5	8.5	7.5	8.0	12.5	11.5	12.0	---	---	---
14	2.5	2.0	2.5	7.5	6.5	7.0	12.5	12.0	12.5	---	---	---
15	3.0	2.5	2.5	7.0	5.5	6.0	12.5	12.0	12.5	---	---	---
16	3.0	2.5	3.0	6.5	5.0	6.0	12.5	11.0	12.0	---	---	---
17	3.0	2.5	2.5	6.0	5.0	5.5	11.0	10.0	10.5	---	---	---
18	3.5	2.0	2.5	---	---	---	11.0	10.0	10.5	---	---	---
19	3.5	2.5	3.0	---	---	---	11.5	10.0	10.5	---	---	---
20	3.5	3.0	3.5	---	---	---	12.0	11.0	11.5	---	---	---
21	4.0	3.0	4.0	---	---	---	13.0	11.5	12.5	---	---	---
22	4.0	4.0	4.0	---	---	---	14.0	12.5	13.5	19.5	18.5	19.0
23	4.5	4.0	4.0	---	---	---	14.5	13.5	14.0	20.0	19.0	19.5
24	5.5	4.5	4.5	---	---	---	15.0	14.0	14.5	20.5	19.5	20.0
25	6.0	4.5	5.0	---	---	---	15.5	14.5	15.0	21.5	20.0	20.5
26	6.5	5.0	6.0	---	---	---	15.5	15.0	15.5	22.0	21.0	21.0
27	6.0	5.0	5.5	6.0	5.5	6.0	15.5	15.0	15.5	22.0	21.0	21.5
28	6.0	5.0	5.5	6.5	6.0	6.0	15.5	14.0	15.0	22.0	21.0	21.5
29	5.5	5.0	5.5	7.5	6.5	7.0	14.5	13.0	14.0	22.0	21.5	22.0
30	---	---	---	8.5	7.5	8.0	13.5	12.0	12.5	22.0	21.5	22.0
31	---	---	---	8.5	7.5	8.0	---	---	---	22.0	21.5	22.0
MONTH	6.5	1.0	3.0	9.0	3.5	5.5	15.5	6.5	11.5	22.0	11.5	18.5

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	22.5	22.0	22.0	27.0	25.5	---	29.5	28.5	29.0	28.5	27.5	28.0
2	23.0	22.0	22.5	---	---	---	29.5	29.0	29.0	28.5	28.0	28.5
3	23.5	22.5	23.0	---	---	---	29.5	29.0	29.5	29.0	28.5	28.5
4	24.0	23.0	23.0	---	---	---	30.0	29.0	29.5	29.0	28.5	28.5
5	24.0	22.5	23.5	---	---	---	30.0	29.5	29.5	28.5	28.5	28.5
6	23.5	23.0	23.5	---	---	---	30.5	29.0	29.5	28.5	28.0	28.5
7	24.0	23.0	23.5	27.0	26.5	27.0	30.5	29.0	30.0	28.5	28.0	28.5
8	24.0	23.0	23.5	27.0	26.5	26.5	30.5	29.5	30.0	28.5	28.0	28.0
9	23.5	22.5	22.5	27.0	26.0	26.5	30.5	29.5	30.0	28.0	27.5	28.0
10	22.5	22.0	22.5	27.0	26.0	26.5	30.0	29.5	30.0	28.0	27.5	27.5
11	23.0	22.0	22.5	27.5	26.5	27.0	30.0	29.5	30.0	27.5	27.0	27.0
12	23.0	22.0	22.5	27.5	26.5	27.0	30.0	29.5	29.5	27.0	26.5	27.0
13	23.0	22.0	22.5	27.0	26.5	27.0	30.0	29.5	29.5	27.0	26.5	26.5
14	23.0	22.0	22.5	27.5	26.5	27.0	30.0	29.0	29.5	27.0	26.5	26.5
15	23.0	22.0	22.5	27.5	27.0	27.0	29.5	29.0	29.5	26.5	26.0	26.5
16	23.0	22.5	22.5	28.0	27.0	27.5	29.5	28.5	29.0	26.0	25.5	25.5
17	23.5	22.0	22.5	28.0	27.5	27.5	28.5	28.0	28.5	25.5	25.0	25.5
18	23.0	22.5	23.0	28.5	27.5	28.0	28.5	28.0	28.0	25.5	25.0	25.0
19	23.5	22.5	23.0	28.5	28.0	28.5	28.5	28.0	28.0	25.0	24.5	25.0
20	23.5	23.0	23.0	29.0	28.0	28.5	28.0	27.5	28.0	25.0	24.5	25.0
21	23.5	22.5	23.0	29.5	28.5	29.0	28.0	27.0	27.5	25.0	24.0	24.5
22	23.5	23.0	23.5	30.0	29.0	29.5	27.5	26.5	27.0	25.5	24.5	25.0
23	24.0	23.0	23.5	29.5	29.0	29.5	27.0	26.5	26.5	25.5	24.5	25.0
24	24.5	23.5	24.0	29.5	29.0	29.0	27.0	26.5	26.5	25.0	24.0	24.5
25	24.5	24.0	24.5	29.5	29.0	29.0	27.0	26.5	27.0	24.5	24.0	24.0
26	25.0	24.5	24.5	29.5	29.0	29.5	27.5	26.5	27.0	24.0	23.5	24.0
27	26.0	24.5	25.0	29.5	29.0	29.5	27.5	27.0	27.5	23.5	23.0	23.0
28	26.5	25.0	25.5	29.5	29.0	29.0	28.0	27.0	27.5	23.0	22.5	23.0
29	26.5	25.5	26.0	29.0	28.5	29.0	28.0	27.5	27.5	23.0	22.0	22.5
30	27.0	25.5	26.5	29.5	28.5	29.0	28.0	27.5	27.5	22.5	22.0	22.5
31	---	---	---	29.5	28.5	29.0	28.0	27.5	28.0	---	---	---
MONTH	27.0	22.0	23.5	30.0	25.5	28.0	30.5	26.5	28.5	29.0	22.0	26.0
YEAR	30.5	1.0	15.0									

01464600 DELAWARE RIVER AT BRISTOL, PA-BURLINGTON, NJ BRIDGE--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	166	156	162	---	---	---	112	98	104	156	147	149
2	168	162	165	---	---	---	121	107	113	156	150	152
3	166	151	157	---	---	---	128	116	120	162	154	157
4	158	126	140	---	---	---	136	121	125	166	159	161
5	131	118	125	---	---	---	142	130	133	165	162	163
6	126	109	117	---	---	---	151	136	139	169	163	165
7	117	103	110	---	---	---	150	140	142	175	167	169
8	108	95	101	---	---	---	151	144	146	177	172	174
9	101	95	97	---	---	---	157	148	151	183	176	178
10	112	99	104	---	---	---	163	153	156	188	179	182
11	127	106	119	---	---	---	166	158	161	197	184	189
12	134	126	129	---	---	---	170	162	165	208	190	201
13	142	131	135	---	---	---	174	166	170	208	190	202
14	148	136	139	---	---	---	185	172	176	205	192	199
15	149	142	145	172	166	167	186	177	180	204	192	199
16	152	146	148	177	168	170	187	176	179	202	193	199
17	156	149	152	182	172	175	183	178	179	200	193	197
18	161	153	156	182	175	177	183	175	179	201	192	196
19	160	157	158	185	177	178	182	174	178	199	193	195
20	---	---	---	188	180	182	181	175	178	198	192	195
21	---	---	---	189	183	185	185	178	181	199	194	196
22	---	---	---	191	185	187	190	182	186	204	195	198
23	---	---	---	192	186	188	194	188	191	201	196	198
24	---	---	---	193	186	189	201	192	194	203	197	199
25	---	---	---	195	189	191	196	195	195	211	199	203
26	---	---	---	196	192	193	---	---	---	212	205	208
27	---	---	---	198	189	192	197	191	193	217	209	212
28	---	---	---	189	117	161	192	158	178	222	212	216
29	---	---	---	120	94	100	170	143	153	224	217	218
30	---	---	---	105	93	97	151	143	145	224	218	220
31	---	---	---	---	---	---	155	144	146	228	220	223
MONTH	168	95	135	198	93	171	201	98	161	228	147	191

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	230	224	226	263	254	257	129	119	122	166	125	142
2	233	227	229	261	252	257	131	123	126	130	122	125
3	235	229	231	262	251	256	140	127	132	130	124	126
4	237	231	233	260	252	256	141	129	133	149	126	130
5	241	234	236	262	254	257	138	130	133	143	134	136
6	245	236	240	265	257	260	143	131	137	143	136	139
7	256	241	247	273	261	265	136	129	131	153	143	146
8	272	249	260	274	262	268	134	129	130	---	---	---
9	284	260	272	---	---	---	139	130	133	---	---	---
10	282	270	276	---	---	---	146	136	141	---	---	---
11	282	268	274	---	---	---	145	122	135	---	---	---
12	275	260	269	271	252	260	123	108	113	---	---	---
13	273	259	266	262	249	255	119	108	111	---	---	---
14	271	257	263	261	223	247	127	112	118	---	---	---
15	269	257	262	247	207	225	136	121	125	---	---	---
16	265	256	260	232	205	216	138	127	131	---	---	---
17	263	254	259	220	210	216	140	122	129	---	---	---
18	268	255	259	---	---	---	130	120	124	---	---	---
19	266	255	259	---	---	---	131	122	124	---	---	---
20	265	255	259	---	---	---	137	124	129	---	---	---
21	266	256	259	---	---	---	140	129	134	---	---	---
22	266	257	260	---	---	---	150	138	142	168	158	163
23	263	256	259	---	---	---	153	145	147	173	165	169
24	267	255	261	---	---	---	159	149	153	176	170	172
25	268	257	261	---	---	---	162	156	158	179	171	174
26	265	254	259	---	---	---	171	160	163	178	172	174
27	267	255	260	120	114	117	173	164	169	182	173	175
28	262	253	258	125	115	119	175	171	172	184	175	177
29	260	255	257	131	120	124	182	174	177	186	177	179
30	---	---	---	140	128	134	182	152	175	190	178	182
31	---	---	---	137	123	132	---	---	---	192	182	187
MONTH	284	224	256	274	114	217	182	108	138	192	122	159

01464600 DELAWARE RIVER AT BRISTOL, PA-BURLINGTON, NJ BRIDGE--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	201	187	192	234	232	---	225	216	219	236	228	231
2	203	191	197	---	---	---	221	217	219	237	229	231
3	210	197	203	---	---	---	223	217	219	235	229	231
4	218	201	211	---	---	---	222	217	220	237	228	231
5	225	211	220	---	---	---	225	218	221	237	224	231
6	225	218	222	---	---	---	224	216	219	236	222	228
7	226	215	221	230	208	221	229	214	219	231	215	224
8	220	212	217	229	195	213	234	213	219	228	214	222
9	218	206	212	222	190	203	222	209	217	226	212	221
10	214	202	208	214	190	198	221	207	214	229	210	218
11	211	203	208	206	195	198	221	205	212	223	211	217
12	211	208	209	202	197	199	216	201	208	220	212	216
13	211	206	208	205	199	201	210	197	205	218	211	214
14	214	206	208	206	201	203	208	196	203	222	213	215
15	211	206	208	211	201	204	205	193	200	219	213	215
16	210	206	208	207	201	203	202	193	198	220	215	216
17	209	207	208	207	201	203	201	194	197	222	216	218
18	216	208	210	207	202	204	201	196	198	223	216	219
19	215	209	211	207	204	205	207	198	200	223	218	220
20	216	211	213	212	206	208	209	200	204	224	219	221
21	221	214	216	215	209	211	211	201	206	227	217	221
22	227	217	220	218	210	214	218	202	210	225	213	219
23	226	217	222	219	212	216	224	206	213	225	212	219
24	227	220	224	222	215	218	223	209	216	223	211	219
25	231	223	226	223	216	218	226	211	218	224	209	217
26	234	224	227	222	216	218	222	214	219	222	209	215
27	237	226	229	223	216	219	226	217	221	218	207	213
28	234	227	231	222	217	220	232	220	223	219	208	213
29	235	229	232	225	218	220	230	221	225	216	209	213
30	235	230	232	221	214	219	233	224	227	217	210	214
31	---	---	---	224	217	219	235	225	229	---	---	---
MONTH	237	187	215	234	190	210	235	193	213	237	207	220
YEAR	284	93	193									

OXYGEN, DISSOLVED (DO), MG/L, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	5.5	5.2	5.4	---	---	---	12.1	11.2	11.6	13.0	12.8	12.9
2	5.6	5.0	5.2	---	---	---	12.7	11.7	12.2	13.1	12.8	12.9
3	5.9	5.0	5.5	---	---	---	13.0	12.4	12.7	13.2	12.9	13.0
4	6.2	5.6	5.9	---	---	---	13.4	12.6	12.9	13.2	12.9	13.1
5	6.4	5.8	6.0	---	---	---	13.4	13.0	13.2	13.4	13.1	13.2
6	6.8	6.1	6.5	---	---	---	13.3	13.0	13.1	13.4	13.1	13.3
7	7.1	5.6	6.7	---	---	---	13.3	13.0	13.1	13.6	13.2	13.4
8	7.4	6.9	7.2	---	---	---	13.1	12.9	13.0	13.8	13.5	13.6
9	7.7	7.2	7.4	---	---	---	12.9	12.6	12.8	13.8	13.4	13.6
10	7.7	7.5	7.6	---	---	---	12.6	12.4	12.5	13.8	13.5	13.6
11	8.3	7.5	7.9	---	---	---	12.5	12.3	12.4	13.7	13.4	13.6
12	8.7	8.2	8.5	---	---	---	12.7	12.3	12.5	14.0	13.4	13.6
13	8.8	8.4	8.6	---	---	---	12.7	12.5	12.6	13.8	13.2	13.6
14	8.8	8.6	8.7	---	---	---	12.6	12.4	12.5	13.5	12.8	13.0
15	8.8	8.5	8.7	10.6	10.4	10.5	12.4	12.0	12.2	13.1	12.7	12.8
16	8.8	8.6	8.7	10.9	10.4	10.6	12.2	11.9	12.0	13.3	12.7	13.0
17	8.7	8.3	8.5	11.2	10.4	10.8	12.7	11.9	12.3	13.2	12.9	13.0
18	8.4	8.2	8.3	11.4	10.9	11.0	12.8	12.4	12.6	13.0	12.8	12.9
19	8.3	8.2	8.2	11.6	10.9	11.2	13.0	12.5	12.7	13.1	12.8	12.9
20	---	---	---	11.8	11.1	11.4	13.4	12.7	12.9	13.1	12.8	12.9
21	---	---	---	11.7	11.3	11.4	13.6	12.9	13.2	12.8	12.6	12.7
22	---	---	---	11.6	11.3	11.4	13.8	13.2	13.4	12.6	12.4	12.5
23	---	---	---	11.5	11.1	11.3	14.1	13.4	13.7	12.7	12.3	12.5
24	---	---	---	11.3	10.9	11.0	14.1	13.6	13.8	12.9	12.5	12.7
25	---	---	---	11.0	10.7	10.8	14.0	13.7	13.8	12.8	12.6	12.7
26	---	---	---	10.9	10.5	10.6	---	---	---	12.9	12.6	12.7
27	---	---	---	10.8	9.9	10.5	12.4	12.2	12.3	13.2	12.6	12.7
28	---	---	---	10.3	9.2	9.6	12.5	12.1	12.3	13.3	12.6	12.9
29	---	---	---	10.7	10.1	10.4	12.9	12.3	12.6	13.5	12.7	13.0
30	---	---	---	11.4	10.5	11.0	13.0	12.5	12.8	13.7	12.9	13.4
31	---	---	---	---	---	---	13.0	12.7	12.8	13.6	13.2	13.4
MONTH	8.8	5.0	7.3	11.8	9.2	10.8	14.1	11.2	12.8	14.0	12.3	13.1

01464600 DELAWARE RIVER AT BRISTOL, PA-BURLINGTON, NJ BRIDGE--Continued

OXYGEN, DISSOLVED (DO), MG/L, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	13.6	13.3	13.5	11.9	11.5	11.7	11.3	10.7	11.0	9.1	8.6	8.8
2	13.7	13.4	13.6	12.1	11.5	11.8	11.5	11.0	11.2	9.0	8.6	8.8
3	13.7	13.4	13.5	12.4	11.6	12.0	11.3	10.1	10.7	8.7	8.3	8.6
4	13.6	13.4	13.5	12.4	12.0	12.2	10.1	9.8	10.0	8.3	7.9	8.2
5	13.6	13.3	13.4	12.6	11.9	12.2	10.2	9.7	10.0	8.0	7.5	7.9
6	13.5	13.2	13.4	13.1	11.8	12.5	10.0	9.7	9.8	7.6	6.7	7.3
7	13.8	13.3	13.5	13.0	12.1	12.5	10.1	9.8	9.9	7.1	6.8	6.8
8	13.9	13.4	13.6	12.7	12.0	12.3	9.9	9.6	9.8	---	---	---
9	13.8	13.4	13.6	---	---	---	9.6	9.3	9.5	---	---	---
10	13.8	13.4	13.6	---	---	---	9.3	8.6	9.0	---	---	---
11	13.6	13.3	13.4	---	---	---	9.2	8.5	8.9	---	---	---
12	13.5	13.3	13.4	11.4	10.8	10.9	9.4	9.0	9.2	---	---	---
13	13.4	13.1	13.3	10.7	10.2	10.4	9.4	9.1	9.2	---	---	---
14	13.4	13.1	13.2	11.0	10.2	10.5	9.3	8.9	9.1	---	---	---
15	13.3	13.0	13.1	12.1	10.6	11.4	9.0	8.9	8.9	---	---	---
16	13.1	12.4	12.8	12.1	10.8	11.4	9.4	8.9	9.2	---	---	---
17	12.8	12.5	12.7	11.7	11.1	11.4	9.7	9.2	9.4	---	---	---
18	12.8	12.2	12.7	---	---	---	9.9	9.5	9.7	---	---	---
19	12.6	12.3	12.5	---	---	---	9.8	9.5	9.6	---	---	---
20	12.4	12.0	12.2	---	---	---	9.6	9.3	9.5	---	---	---
21	12.1	11.9	12.0	---	---	---	9.4	9.1	9.3	---	---	---
22	12.1	11.7	11.9	---	---	---	9.2	8.8	9.0	7.8	7.3	7.5
23	12.2	11.7	11.9	---	---	---	8.8	8.4	8.6	7.5	7.1	7.3
24	12.3	11.7	12.0	---	---	---	8.5	8.0	8.2	7.3	6.9	7.1
25	12.2	11.8	12.0	---	---	---	8.1	7.8	7.9	7.3	6.8	7.0
26	12.1	11.7	11.9	---	---	---	7.9	7.7	7.8	7.7	6.8	7.1
27	12.0	11.6	11.8	12.0	11.7	11.8	7.7	7.5	7.6	7.8	6.7	7.2
28	11.8	11.5	11.7	12.0	11.7	11.8	8.0	7.5	7.7	8.0	6.7	7.2
29	11.8	11.4	11.6	11.7	11.2	11.5	8.4	7.7	8.0	7.6	6.8	7.2
30	---	---	---	11.3	10.8	11.0	8.9	8.2	8.4	7.4	6.8	7.0
31	---	---	---	11.1	10.8	10.9	---	---	---	7.1	6.5	6.8
MONTH	13.9	11.4	12.8	13.1	10.2	11.6	11.5	7.5	9.2	9.1	6.5	7.5

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	7.6	6.3	6.8	4.6	3.9	---	6.5	4.7	5.3	5.4	3.7	4.4
2	7.7	6.3	6.8	---	---	---	6.3	4.8	5.3	5.6	3.8	4.7
3	8.0	6.1	6.6	---	---	---	6.5	4.7	5.3	6.6	3.9	5.2
4	8.2	6.0	6.7	---	---	---	6.1	4.9	5.3	5.9	4.0	5.1
5	7.5	5.6	6.5	---	---	---	5.7	4.8	5.2	5.5	3.5	4.5
6	6.9	5.5	6.2	---	---	---	5.9	4.5	5.2	5.6	2.8	4.5
7	7.5	5.6	6.2	7.9	6.5	7.2	5.6	4.3	4.9	6.6	3.9	5.2
8	7.5	5.5	6.3	7.4	5.5	6.5	5.8	4.2	4.9	6.5	4.3	5.4
9	7.0	5.5	6.3	8.0	5.8	6.8	6.0	4.3	5.0	6.1	4.4	5.4
10	6.7	5.5	6.1	7.5	6.0	6.8	5.7	4.3	4.9	6.4	4.5	5.5
11	7.3	5.4	6.2	7.7	6.1	6.8	5.4	4.3	4.8	5.7	4.5	5.2
12	8.1	5.6	6.5	8.2	6.2	7.0	6.3	4.2	5.1	6.1	3.4	4.7
13	7.7	6.0	6.8	8.0	6.4	7.1	6.3	4.7	5.4	6.4	5.0	5.7
14	8.5	6.5	7.4	8.3	6.5	7.2	6.5	5.0	5.6	6.4	5.1	5.7
15	8.7	6.9	7.6	7.5	6.5	7.0	6.5	4.7	5.6	6.5	5.1	5.7
16	8.0	6.7	7.3	7.4	6.5	6.8	6.7	4.4	5.5	5.9	4.7	5.3
17	8.2	6.5	7.2	6.9	6.0	6.3	7.3	4.7	5.9	5.4	4.4	5.0
18	7.8	6.6	7.1	7.1	5.6	6.0	6.4	5.4	5.9	5.4	4.4	4.9
19	7.3	6.1	6.8	6.3	5.3	5.7	5.9	4.9	5.3	5.0	3.9	4.4
20	7.1	5.8	6.4	6.3	5.0	5.6	6.3	4.4	5.3	4.2	3.6	3.9
21	7.8	5.9	6.7	6.4	4.8	5.6	6.8	4.9	5.7	4.1	3.3	3.6
22	7.3	6.0	6.7	6.5	4.6	5.4	6.2	5.1	5.6	3.7	3.2	3.4
23	7.5	6.0	6.6	5.4	4.4	4.9	6.7	4.8	5.7	4.0	3.0	3.5
24	7.4	6.0	6.5	6.3	3.7	4.8	7.4	4.7	6.0	4.1	3.3	3.7
25	6.8	5.8	6.2	6.1	4.2	5.1	7.1	5.2	6.1	4.0	3.4	3.7
26	6.6	5.7	6.0	6.1	4.5	5.3	6.9	4.7	5.8	5.1	3.3	4.0
27	6.8	5.3	5.9	6.2	4.6	5.4	6.3	5.0	5.7	5.2	3.7	4.3
28	6.4	5.2	5.6	6.3	5.0	5.5	5.5	4.4	5.1	5.3	3.9	4.4
29	5.6	4.7	5.1	6.0	5.1	5.5	4.8	3.8	4.4	5.9	4.1	4.6
30	5.7	4.1	4.8	6.2	4.9	5.3	4.4	3.5	4.0	5.7	4.2	4.8
31	---	---	---	6.3	4.7	5.2	5.1	3.5	4.1	---	---	---
MONTH	8.7	4.1	6.5	8.3	3.7	6.0	7.4	3.5	5.3	6.6	2.8	4.7
YEAR	14.1	2.8	8.9									

01464600 DELAWARE RIVER AT BRISTOL, PA-BURLINGTON, NJ BRIDGE--Continued

PH (STANDARD UNITS), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	6.8	6.7	6.7	---	---	---	6.9	6.7	6.8	7.3	7.2	7.3
2	6.8	6.7	6.7	---	---	---	7.0	6.8	6.9	7.4	7.3	7.3
3	6.8	6.7	6.8	---	---	---	7.0	6.9	6.9	7.4	7.3	7.3
4	6.8	6.7	6.7	---	---	---	7.1	6.9	7.0	7.4	7.3	7.4
5	6.9	6.7	6.8	---	---	---	7.1	7.0	7.1	7.4	7.4	7.4
6	6.9	6.8	6.9	---	---	---	7.1	7.1	7.1	7.5	7.4	7.4
7	6.9	6.8	6.9	---	---	---	7.1	7.1	7.1	7.5	7.4	7.4
8	6.9	6.9	6.9	---	---	---	7.2	7.1	7.1	7.5	7.4	7.5
9	6.9	6.9	6.9	---	---	---	7.1	7.1	7.1	7.5	7.4	7.4
10	6.9	6.8	6.9	---	---	---	7.1	7.1	7.1	7.4	7.4	7.4
11	6.9	6.7	6.8	---	---	---	7.2	7.1	7.1	7.5	7.3	7.4
12	6.9	6.7	6.8	---	---	---	7.2	7.1	7.1	7.6	7.4	7.4
13	6.9	6.7	6.9	---	---	---	7.1	7.1	7.1	7.5	7.3	7.4
14	6.9	6.9	6.9	---	---	---	7.4	7.1	7.2	7.4	7.3	7.4
15	7.0	6.9	6.9	7.0	7.0	7.0	7.2	7.1	7.1	7.4	7.3	7.4
16	7.0	6.9	6.9	7.0	6.9	7.0	7.1	7.1	7.1	7.4	7.3	7.3
17	6.9	6.9	6.9	7.1	6.9	7.0	7.2	7.1	7.2	7.4	7.3	7.3
18	6.9	6.9	6.9	7.1	7.0	7.0	7.2	7.2	7.2	7.4	7.3	7.3
19	6.9	6.9	6.9	7.1	7.0	7.0	7.2	7.2	7.2	7.4	7.3	7.3
20	---	---	---	7.1	7.0	7.1	7.3	7.2	7.2	7.4	7.3	7.4
21	---	---	---	7.1	7.0	7.1	7.3	7.2	7.2	7.4	7.3	7.3
22	---	---	---	7.1	7.1	7.1	7.3	7.2	7.3	7.3	7.3	7.3
23	---	---	---	7.1	7.0	7.1	7.3	7.3	7.3	7.4	7.3	7.3
24	---	---	---	7.1	7.0	7.0	7.3	7.3	7.3	7.4	7.3	7.4
25	---	---	---	7.1	6.9	7.0	7.3	7.2	7.3	7.5	7.4	7.4
26	---	---	---	7.1	7.0	7.0	---	---	---	7.5	7.4	7.4
27	---	---	---	7.2	7.0	7.1	7.2	7.2	7.2	7.6	7.4	7.5
28	---	---	---	7.1	6.8	6.9	7.2	7.2	7.2	7.5	7.4	7.5
29	---	---	---	6.8	6.6	6.7	7.2	7.1	7.1	7.5	7.4	7.5
30	---	---	---	6.8	6.7	6.7	7.1	7.1	7.1	7.5	7.5	7.5
31	---	---	---	---	---	---	7.3	7.1	7.2	7.6	7.5	7.5
MONTH	7.0	6.7	6.9	7.2	6.6	7.0	7.4	6.7	7.1	7.6	7.2	7.4

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	7.7	7.5	7.6	7.5	7.4	7.5	---	---	---	6.8	6.7	6.8
2	7.7	7.6	7.6	7.5	7.4	7.5	---	---	---	6.7	6.6	6.6
3	7.6	7.6	7.6	7.5	7.5	7.5	---	---	---	6.7	6.6	6.7
4	7.6	7.6	7.6	7.5	7.4	7.5	---	---	---	6.7	6.6	6.6
5	7.6	7.5	7.6	7.5	7.5	7.5	---	---	---	6.7	6.6	6.6
6	7.6	7.5	7.5	7.5	7.4	7.5	7.1	6.9	---	6.6	6.6	6.6
7	7.6	7.5	7.6	7.5	7.4	7.5	7.0	6.9	6.9	6.6	6.5	6.5
8	7.7	7.6	7.6	7.5	7.5	7.5	6.9	6.9	6.9	---	---	---
9	7.6	7.6	7.6	---	---	---	6.9	6.9	6.9	---	---	---
10	7.7	7.5	7.6	---	---	---	6.9	6.6	6.8	---	---	---
11	7.6	7.6	7.6	---	---	---	6.8	6.6	6.7	---	---	---
12	7.6	7.6	7.6	7.5	7.4	7.4	6.7	6.6	6.7	---	---	---
13	7.6	7.6	7.6	7.4	7.3	7.4	6.7	6.6	6.7	---	---	---
14	7.6	7.5	7.6	7.5	7.4	7.4	6.8	6.6	6.7	---	---	---
15	7.6	7.5	7.5	7.4	7.3	7.4	6.8	6.7	6.8	---	---	---
16	7.5	7.5	7.5	7.5	7.3	7.4	6.8	6.7	6.8	---	---	---
17	7.5	7.4	7.5	7.6	7.3	7.4	6.8	6.7	6.8	---	---	---
18	7.5	7.4	7.5	---	---	---	6.8	6.7	6.8	---	---	---
19	7.5	7.4	7.5	---	---	---	6.9	6.8	6.8	---	---	---
20	7.5	7.4	7.5	---	---	---	6.9	6.8	6.8	---	---	---
21	7.5	7.4	7.5	---	---	---	6.9	6.8	6.8	---	---	---
22	7.5	7.4	7.4	---	---	---	6.8	6.8	6.8	6.8	6.7	6.8
23	7.5	7.4	7.4	---	---	---	6.8	6.7	6.8	6.8	6.7	6.8
24	7.5	7.4	7.4	---	---	---	6.7	6.6	6.7	6.8	6.7	6.8
25	7.5	7.4	7.4	---	---	---	6.7	6.6	6.7	6.8	6.7	6.7
26	7.4	7.3	7.4	---	---	---	5.7	6.6	6.7	6.8	6.7	6.7
27	7.4	7.4	7.4	---	---	---	6.7	6.6	6.7	6.8	6.7	6.8
28	7.4	7.4	7.4	---	---	---	6.8	6.7	6.7	6.8	6.7	6.8
29	7.5	7.4	7.4	---	---	---	6.8	6.7	6.8	6.9	6.7	6.8
30	---	---	---	---	---	---	6.9	6.8	6.8	6.9	6.8	6.8
31	---	---	---	---	---	---	---	---	---	6.9	6.8	6.8
MONTH	7.7	7.3	7.5	7.6	7.3	7.5	7.1	6.6	6.8	6.9	6.5	6.7

01464600 DELAWARE RIVER AT BRISTOL, PA-BURLINGTON, NJ BRIDGE--Continued

PH (STANDARD UNITS), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	7.0	6.8	6.9	6.8	6.7	---	7.0	6.8	6.9	6.7	6.7	6.7
2	7.0	6.8	6.9	---	---	---	7.0	6.9	6.9	6.8	6.6	6.7
3	7.1	6.8	6.9	---	---	---	7.0	6.8	6.9	6.9	6.7	6.8
4	7.3	6.9	7.0	---	---	---	7.0	6.9	6.9	6.8	6.7	6.7
5	7.1	6.9	7.0	---	---	---	6.9	6.8	6.9	6.8	6.7	6.7
6	7.0	6.9	6.9	---	---	---	7.0	6.8	6.9	6.8	6.6	6.7
7	7.0	6.8	6.9	7.2	7.0	7.1	6.9	6.8	6.8	6.8	6.6	6.8
8	7.0	6.8	6.9	7.1	6.8	7.0	7.0	6.8	6.9	6.8	6.7	6.8
9	6.9	6.7	6.8	7.2	6.8	7.0	7.0	6.8	6.9	6.8	6.7	6.8
10	6.8	6.7	6.8	7.0	6.9	6.9	6.9	6.8	6.8	6.8	6.6	6.7
11	7.0	6.7	6.8	7.1	6.9	6.9	6.9	6.8	6.8	6.8	6.7	6.8
12	7.1	6.8	6.9	7.2	6.9	7.0	6.9	6.8	6.8	6.8	6.7	6.8
13	7.0	6.8	6.9	7.2	6.9	7.0	6.9	6.7	6.8	6.8	6.7	6.8
14	7.1	6.8	6.9	7.2	6.9	7.0	6.9	6.8	6.8	6.8	6.7	6.8
15	7.1	6.8	6.9	7.1	6.9	7.0	6.9	6.7	6.8	6.9	6.8	6.8
16	7.0	6.8	6.9	7.2	7.0	7.1	7.0	6.7	6.8	6.9	6.8	6.8
17	7.0	6.8	6.9	7.1	7.0	7.0	7.0	6.7	6.8	6.8	6.8	6.8
18	6.9	6.9	6.9	7.1	6.9	7.0	6.9	6.8	6.8	6.8	6.8	6.8
19	7.0	6.8	6.9	7.0	6.9	6.9	6.8	6.7	6.8	6.8	6.7	6.8
20	7.0	6.8	6.9	7.0	6.9	6.9	6.9	6.7	6.8	6.8	6.7	6.7
21	7.1	6.9	7.0	7.1	6.9	6.9	6.9	6.7	6.8	6.7	6.7	6.7
22	7.0	6.9	6.9	7.1	6.9	6.9	6.9	6.8	6.8	6.7	6.7	6.7
23	7.1	6.9	6.9	6.9	6.8	6.9	6.9	6.7	6.8	6.7	6.7	6.7
24	7.0	6.9	6.9	7.0	6.8	6.9	6.9	6.7	6.8	6.8	6.7	6.7
25	6.9	6.9	6.9	7.0	6.8	6.9	6.9	6.7	6.8	6.8	6.7	6.7
26	6.9	6.8	6.9	7.0	6.8	6.9	6.9	6.7	6.8	6.8	6.7	6.7
27	6.9	6.8	6.8	7.0	6.8	6.9	6.8	6.7	6.8	6.8	6.7	6.8
28	6.8	6.8	6.8	7.0	6.9	6.9	6.7	6.7	6.7	6.8	6.7	6.8
29	6.8	6.7	6.8	7.0	6.9	6.9	6.7	6.6	6.7	6.9	6.7	6.8
30	6.8	6.7	6.7	7.0	6.9	6.9	6.7	6.6	6.7	6.8	6.7	6.8
31	---	---	---	7.1	6.8	6.9	6.7	6.6	6.7	---	---	---
MONTH	7.3	6.7	6.9	7.2	6.7	7.0	7.0	6.6	6.8	6.9	6.6	6.8
YEAR	7.7	6.5	7.0									

01465835 SOUTH BRANCH RANCOCAS CREEK AT RETREAT, NJ

LOCATION.--Lat 39°55'23", long 74°43'05", Burlington County, Hydrologic Unit 02040202, at bridge on light-duty road in Retreat, 40 ft (12.2 m) upstream of Friendship Creek, 1.2 mi (1.9 km) southwest of Buddtown, and 1.8 mi (2.9 km) northeast of Beaverville.

DRAINAGE AREA.--44.4 mi² (115.0 km²).

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1975 to current year.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIOCHEM UNINHIB 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)	HARD-NESS (MG/L AS CACO3)
OCT 02...	0930	105	64	4.4	18.5	5.8	1.3	79	790	12
FEB 07...	1030	41	69	4.4	1.5	14.7	1.3	4	6	10
APR 17...	1000	18	57	4.4	10.0	11.2	--	13	<2	7
JUN 03...	1030	32	59	4.5	24.0	6.7	1.4	350	49	8
JUL 16...	1045	10	58	4.6	26.5	8.4	1.9	230	340	20
AUG 19...	1030	14	58	4.9	23.0	6.6	2.2	130	490	9
SEP 25...	1000	--	72	4.6	19.5	7.2	2.3	--	--	12

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)
OCT 02...	2.7	1.2	2.8	1.4	0	0	0	.0	9.0	4.9
FEB 07...	2.5	1.0	3.0	.9	0	0	0	--	13	5.2
APR 17...	1.4	.8	2.3	1.0	0	0	0	--	11	4.2
JUN 03...	2.0	.8	3.1	.9	0	0	0	--	11	5.2
JUL 16...	6.0	1.3	4.5	1.8	1	0	1	--	12	6.4
AUG 19...	2.1	1.0	3.3	1.4	1	0	1	--	12	5.2
SEP 25...	2.7	1.2	3.7	1.8	1	0	1	--	14	6.1

DATE	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, ORTHOPH OSPHATE TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT 02...	.1	6.0	50	<1.0	.200	1.3	1.5	--	.24	15
FEB 07...	.1	5.8	44	E.53	.070	.26	.33	--	<.01	7.9
APR 17...	.0	2.5	30	.20	.140	.35	.49	.69	.17	11
JUN 03...	.1	3.5	42	.25	.430	.43	.86	1.1	.38	16
JUL 16...	.1	5.3	61	<.05	.110	.66	.77	--	.37	11
AUG 19...	.1	6.8	43	<.05	.200	1.0	1.2	--	.31	11
SEP 25...	.1	5.8	42	<.05	.110	.51	.62	--	.28	6.2

01465835 SOUTH BRANCH RANCOCAS CREEK AT RETREAT, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	BORON, TOTAL RECOVERABLE (UG/L AS B)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)
OCT								
02...	0930	350	1	0	60	1	10	3

DATE	IRON, TOTAL RECOVERABLE (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	PHENOLS (UG/L)
OCT								
02...	1700	7	30	<.5	3	0	30	1

01465850 SOUTH BRANCH RANCOCAS CREEK AT VINCENTOWN, NJ

LOCATION.--Lat 39°56'22", long 74°45'50", Burlington County, Hydrologic Unit 02040202, at bridge on Lumberton-Vincentown Road at Vincentown, 2.9 mi (4.7 km) southeast of Lumberton, and 3.1 mi (5.0 km) upstream from Southwest Branch.

DRAINAGE AREA.--53.3 mi² (138.0 km²).

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1925, 1959-62, 1975 to current year.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIOCHEM UNINHIB 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)	HARD-NESS (MG/L AS CACO3)
FEB 07...	1330	53	75	6.3	1.0	14.0	2.0	2	350	19
APR 17...	1200	23	60	5.7	10.0	8.6	--	13	25	15
JUN 05...	1130	41	75	6.2	20	6.8	1.7	330	330	19
JUL 16...	0915	14	75	6.6	24.	6.0	2.0	200	500	9
AUG 20...	1015	20	70	6.8	22.5	6.4	2.2	200	7900	18
SEP 29...	1030	14	88	6.8	17.0	--	.8	17	94	26

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)
FEB 07...	5.4	1.3	3.7	1.2	7	0	6	--	15	6.0
APR 17...	3.7	1.3	2.8	1.2	5	0	4	--	12	5.0
JUN 05...	5.5	1.3	4.4	1.4	7	0	6	.3	15	6.0
JUL 16...	2.0	1.0	3.1	1.2	10	0	8	--	11	5.2
AUG 20...	5.1	1.3	4.3	1.8	10	0	8	--	14	6.2
SEP 29...	7.9	1.5	4.6	2.3	11	0	9	.0	16	6.7

DATE	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, ORTHOPH OSPHATE TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
FEB 07...	.1	6.3	56	E.81	.100	.14	.24	--	<.01	7.6
APR 17...	.1	3.2	47	.40	.160	.66	.82	1.2	.38	10
JUN 05...	.1	4.8	66	.49	.220	.78	1.0	1.5	.58	14
JUL 16...	.1	4.7	50	.56	.130	.87	1.0	1.6	.98	11
AUG 20...	.1	7.4	58	.45	.090	.88	.97	1.4	.77	13
SEP 29...	.1	7.2	60	.40	.310	.35	.66	1.1	.49	6.0

DATE	TIME	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE)	BORON, TOTAL RECOV-ERABLE (UG/L AS B)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)
JUN 05...	1130	210	1	0	90	0	<10	3
SEP 29...	1030	30	1	0	80	0	10	2

01465850 SOUTH BRANCH RANCOCAS CREEK AT VINCENTOWN, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	PHENOLS (UG/L)
JUN								
05...	3200	6	30	.3	1	0	30	1
SEP								
29...	1600	2	30	.2	4	0	20	1

01465970 NORTH BRANCH RANCOCAS CREEK AT BROWNS MILLS, NJ

LOCATION.--Lat 39°58'04", long 74°34'48", Burlington County, Hydrologic Unit 02040202, at bridge on Lakehurst Road at outflow of Mirror Lake in Browns Mills, 1.5 mi (2.4 km) north of Browns Mills Junction, and 2.0 mi (3.2 km) northwest of outflow of Country Lake.

DRAINAGE AREA.--19.5 mi^2 (50.5 km^2).

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1975 to current year.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIOCHEM UNINHIB 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)	HARD-NESS (MG/L AS CACO3)
OCT 03...	1000	57	37	5.5	19.5	8.5	1.4	130	350	8
FEB 06...	1030	33	49	5.2	4.0	14.5	1.7	<2	2	10
APR 09...	1045	101	41	5.1	14.0	10.6	1.2	7	79	9
MAY 21...	1030	53	36	5.3	19.5	6.9	1.9	<20	140	8
JUL 01...	1045	17	43	5.7	24.0	7.3	2.4	1700	920	9
AUG 12...	1130	16	53	5.6	27.0	5.8	1.6	20	350	13
SEP 23...	1000	14	47	6.1	22.5	7.1	1.3	<20	270	11

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)
OCT 03...	1.7	.8	2.2	.8	4	0	3	--	5.4	4.1
FEB 06...	2.2	1.0	2.8	.9	1	0	1	--	10	4.3
APR 09...	2.1	1.0	2.2	.8	2	0	2	--	8.6	3.5
MAY 21...	1.7	.9	2.8	.7	2	0	2	.0	8.7	4.0
JUL 01...	2.0	1.0	2.7	.9	2	0	2	--	6.8	4.4
AUG 12...	2.7	1.5	3.1	1.1	5	0	4	--	10	4.8
SEP 23...	2.3	1.2	3.1	1.1	4	0	3	.0	8.0	5.0

DATE	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, ORTHOPH OSPHATE TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT 03...	.0	4.6	31	<1.0	.400	.05	.45	--	.13	7.6
FEB 06...	.1	4.1	32	.12	.030	.90	.93	1.0	<.01	4.6
APR 09...	.0	1.9	22	.15	.090	.27	.36	.51	.30	8.1
MAY 21...	.0	2.3	28	.05	.070	.07	.14	.19	.04	8.0
JUL 01...	.1	3.2	40	.10	.160	.20	.36	.46	.07	9.0
AUG 12...	.1	4.0	44	<.05	.190	.12	.31	--	.21	8.3
SEP 23...	.1	4.4	45	.05	.100	.52	.62	.67	.18	6.3

01465970 NORTH BRANCH RANCOCAS CREEK AT BROWNS MILLS, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	BORON, TOTAL RECOVERABLE (UG/L AS B)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)
MAY								
21...	1030	120	1	0	10	0	10	4
SEP								
23...	1000	50	1	0	40	0	10	5

DATE	IRON, TOTAL RECOVERABLE (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	PHENOLS (UG/L)
MAY								
21...	1700	12	30	.3	0	0	30	2
SEP								
23...	2800	13	30	.1	2	0	20	1

01466500 MCDONALDS BRANCH IN LEBANON STATE FOREST, NJ
(Hydrologic bench-mark station)

LOCATION.--Lat 39°53'05", long 74°30'20", Burlington County, Hydrologic Unit 02040202, on right bank in Lebanon State Forest, 25 ft (7.6 m) upstream from Butterworth Road Bridge, 3.4 mi (5.5 km) upstream from confluence with Cooper Branch, and 7.0 mi (11.3 km) southeast of Browns Mills.

DRAINAGE AREA.--2.31 mi^2 (5.98 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1953 to current year. Prior to October 1962, published as "MoDonald Branch in Lebanon State Forest".

GAGE.--Water-stage recorder and concrete control. Datum of gage is 117.73 ft (35.884 m) National Geodetic Vertical Datum of 1929 (levels from New Jersey Geological Survey bench mark).

REMARKS.--Water-discharge records good except those for winter months, which are fair. Gage-height record is collected above concrete control and discharge record, which includes leakage around control, is at site 785 ft (239 m) downstream.

AVERAGE DISCHARGE.--27 years, 2.36 ft^3/s (0.067 m^3/s), 13.88 in/yr (353 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 35 ft^3/s (0.991 m^3/s) Aug. 25, 1958, gage height, 2.33 ft (0.710 m); minimum daily, 0.8 ft^3/s (0.023 m^3/s) July 6, 19, 1967.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 7.0 ft^3/s (0.198 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Apr. 10	1230	*8.4	0.24	1.59	0.485

Minimum discharge, 1.0 ft^3/s (0.028 m^3/s) many days in September.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.0	1.8	2.0	2.0	1.9	1.9	5.7	4.8	2.3	2.0	1.6	1.1
2	2.0	1.8	2.0	1.9	1.9	1.9	5.2	4.5	2.2	1.9	1.5	1.1
3	1.9	2.0	2.0	1.8	1.8	1.9	4.3	3.9	2.3	2.0	1.6	1.2
4	1.9	2.0	2.0	1.8	1.9	1.9	4.5	3.7	2.4	2.0	1.6	1.1
5	1.9	2.0	1.9	1.8	2.0	2.0	4.6	3.4	2.2	1.9	1.5	1.1
6	2.3	1.9	1.9	1.8	1.9	2.1	4.2	3.3	2.2	1.8	1.5	1.1
7	2.0	1.9	2.0	1.7	1.9	2.0	3.8	3.2	2.1	1.7	1.4	1.1
8	2.0	1.9	2.0	1.7	1.9	2.1	3.6	3.5	2.1	1.6	1.4	1.0
9	1.9	1.8	2.0	1.8	1.9	2.2	4.7	3.5	2.1	1.6	1.4	1.0
10	2.8	1.8	2.0	1.7	1.9	2.0	7.6	3.3	2.4	1.6	1.4	1.1
11	3.9	2.1	2.0	2.0	1.8	2.5	5.9	3.2	2.2	1.6	1.4	1.0
12	3.4	3.0	1.9	3.1	1.9	2.2	4.6	3.2	2.1	1.6	1.4	1.0
13	3.4	3.1	2.0	3.4	1.9	2.2	4.2	3.4	2.0	1.6	1.4	1.0
14	3.3	2.9	2.0	3.0	1.9	4.1	4.1	3.2	2.0	1.5	1.4	1.0
15	2.9	2.5	2.0	2.8	1.9	4.3	4.4	3.0	2.0	1.5	1.4	1.2
16	2.5	2.2	2.0	2.5	2.1	3.3	4.1	3.0	2.0	1.5	1.4	1.1
17	2.2	2.1	2.0	2.3	2.2	3.0	3.9	2.9	2.0	1.6	1.4	1.1
18	2.2	2.0	1.9	2.2	2.2	3.2	3.8	3.0	2.0	1.6	1.4	1.2
19	2.1	2.0	1.9	2.6	2.2	2.8	3.6	3.1	1.9	1.5	1.4	1.1
20	2.0	2.0	1.9	2.4	2.2	2.7	3.4	3.1	1.9	1.5	1.3	1.1
21	2.0	2.0	1.9	2.3	2.1	3.4	3.4	3.2	1.8	1.5	1.2	1.1
22	2.0	1.9	1.9	2.3	2.2	4.2	3.3	3.2	1.7	1.4	1.3	1.1
23	2.0	1.9	2.0	2.6	2.6	4.3	3.4	3.0	1.7	1.5	1.2	1.1
24	2.0	1.9	2.1	2.4	2.6	3.6	3.4	2.8	1.7	1.5	1.2	1.0
25	1.9	1.9	2.4	2.2	2.3	5.1	3.3	2.8	1.7	1.5	1.2	1.1
26	1.9	2.3	2.5	2.2	2.1	5.0	3.3	2.7	1.7	1.4	1.2	1.1
27	1.9	2.6	2.4	2.1	2.1	3.9	3.7	2.6	1.7	1.4	1.2	1.0
28	1.9	2.6	2.1	2.0	2.0	3.3	4.5	2.5	1.7	1.4	1.1	1.0
29	1.9	2.4	2.0	2.0	2.0	3.7	4.9	2.3	1.8	1.9	1.2	1.0
30	1.8	2.1	2.0	1.9	---	4.3	4.9	2.3	2.2	2.1	1.2	1.0
31	1.8	---	2.0	1.9	---	4.8	---	2.3	---	1.8	1.1	---
TOTAL	69.7	64.4	62.7	68.2	59.3	95.9	128.3	97.9	60.1	51.0	41.9	32.2
MEAN	2.25	2.15	2.02	2.20	2.04	3.09	4.28	3.16	2.00	1.65	1.35	1.07
MAX	3.9	3.1	2.5	3.4	2.6	5.1	7.6	4.8	2.4	2.1	1.6	1.2
MIN	1.8	1.8	1.9	1.7	1.8	1.9	3.3	2.3	1.7	1.4	1.1	1.0
CFSM	.97	.93	.87	.95	.88	1.34	1.85	1.37	.87	.71	.58	.46
IN.	1.12	1.04	1.01	1.10	.95	1.54	2.07	1.58	.97	.82	.67	.52

CAL YR 1979 TOTAL 1252.9 MEAN 3.43 MAX 14 MIN 1.8 CFSM 1.49 IN 20.17
WTR YR 1980 TOTAL 831.6 MEAN 2.27 MAX 7.6 MIN 1.0 CFSM .98 IN 13.39

01466500 MCDONALDS BRANCH IN LEBANON STATE FOREST, NJ--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1963 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1968 to current year.
WATER TEMPERATURES: October 1960 to current year.

INSTRUMENTATION.--Temperature recorder since October 1960, water-quality monitor since October 1968.

REMARKS.--Interruptions in the record were due to malfunctions of the instrument.

EXTREMES FOR PERIOD OF DAILY RECORDS.--
SPECIFIC CONDUCTANCE: Maximum, 182 micromhos June 16, 1969; minimum, 19 micromhos Aug. 25, 1979.
WATER TEMEPRATURES: Maximum, 22.0°C Aug. 1, 1970; minimum, 0.0°C on many days during winter months.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 64 micromhos Jan. 13; minimum recorded, 23 micromhos Oct. 3.
WATER TEMPERATURES: Maximum recorded, 17.0°C July 30, 31; minimum, 1.0°C Mar. 14, 15, 16.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIOCHEM UNINHIB 5 DAY (MG/L)	COLI-FORM, TOTAL, IMMED. (COLS. PER 100 ML)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)
NOV 28...	1400	2.6	48	4.0	10.0	3.2	.4	--	--	57
JAN 24...	1300	2.3	53	4.0	3.5	5.1	1.0	110	<1	K26
MAR 28...	1145	3.3	52	4.1	4.0	7.7	.2	--	<1	--
MAY 28...	1330	2.4	37	4.3	13.0	3.0	.1	210	<2	55
JUL 22...	1130	1.4	28	4.6	15.0	2.2	.7	K40	K1	60
SEP 17...	1100	1.1	25	4.5	14.0	--	.8	72	K8	200

DATE	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
NOV 28...	3	.5	.3	1.6	.3	0	4.8	3.5	.0
JAN 24...	3	.6	.4	1.8	.6	0	6.3	2.8	.0
MAR 28...	17	2.7	2.4	1.5	.5	0	11	2.5	.0
MAY 28...	2	.4	.3	1.6	.1	0	3.6	3.2	.0
JUL 22...	2	.3	.3	1.7	.2	2	2.0	3.1	.0
SEP 17...	4	.9	.4	2.0	.4	4	3.4	2.8	.0

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, ORTHOPH OSPHATE DISSOL. (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)
NOV 28...	3.3	21	1	.01	.01	.01	.000	.000	--
JAN 24...	3.2	19	1	.01	.02	.02	.010	.010	5.0
MAR 28...	2.1	27	1	.01	.03	.03	--	.040	5.9
MAY 28...	2.3	19	1	.01	.01	.01	.000	.000	5.3
JUL 22...	4.1	25	1	.00	.01	.01	.010	.000	3.7
SEP 17...	6.4	17	--	--	.02	.02	.000	.000	.7

01466500 MCDONALDS BRANCH IN LEBANON STATE FOREST, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	ARSENIC TOTAL (UG/L AS AS)	ARSENIC SUSPENDED TOTAL (UG/L AS AS)	ARSENIC DISSOLVED (UG/L AS AS)	BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	BARIUM, DISSOLVED (UG/L AS BA)	BERYLLIUM, DISSOLVED (UG/L AS BE)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM SUSPENDED RECOVERABLE (UG/L AS CD)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, SUSPENDED RECOV. (UG/L AS CR)
NOV 28...	1400	1	0	1	20	20	<1	<1	--	<1	10	10
MAY 28...	1330	1	0	1	<50	10	<1	2	0	2	<10	--

DATE	CHROMIUM, DISSOLVED (UG/L AS CR)	COBALT, DISSOLVED (UG/L AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, DISSOLVED (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, SUSPENDED RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, DISSOLVED (UG/L AS PB)	LITHIUM DISSOLVED (UG/L AS LI)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)
NOV 28...	0	5	3	3	240	--	180	4	<10	<4	20
MAY 28...	2	<3	2	<10	240	60	180	0	<10	<4	10

DATE	MANGANESE, SUSPENDED RECOV. (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MERCURY SUSPENDED RECOVERABLE (UG/L AS HG)	MERCURY DISSOLVED (UG/L AS HG)	MOLYBDENUM, DISSOLVED (UG/L AS MO)	SELENIUM, TOTAL (UG/L AS SE)	SELENIUM, SUSPENDED TOTAL (UG/L AS SE)	SELENIUM, DISSOLVED (UG/L AS SE)	SILVER, TOTAL RECOVERABLE (UG/L AS AG)	SILVER, SUSPENDED RECOVERABLE (UG/L AS AG)
NOV 28...	--	14	.1	.0	.1	<10	0	0	0	0	0
MAY 28...	1	9	.1	--	<.1	<10	0	0	0	0	0

DATE	SILVER, DISSOLVED (UG/L AS AG)	STRONTIUM, DISSOLVED (UG/L AS SR)	VANADIUM, DISSOLVED (UG/L AS V)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, DISSOLVED (UG/L AS ZN)	GROSS ALPHA, DISSOLVED (UG/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT)	GROSS ALPHA, DISSOLVED (PCI/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (PCI/L AS U-NAT)	GROSS BETA, DISSOLVED (PCI/L AS CS-137)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137)
NOV 28...	0	6	<6.0	20	12	2.0	<.5	1.4	<.3	2.1	<.5
MAY 28...	0	5	<6.0	20	<4	--	--	--	--	--	--

DATE	GROSS BETA, DISSOLVED (PCI/L AS SR/YT-90)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/YT-90)	RADIUM 226, DISSOLVED, RADON METHOD (PCI/L)	URANIUM DISSOLVED, EXTRACTION (UG/L)	CYANIDE TOTAL (MG/L AS CN)	PCB TOTAL (UG/L)	PCB, TOTAL IN BOTTOM MATERIAL (UG/KG)	NAPHTHALENES, POLYCHLOR. TOTAL (UG/L)	ALDRIN, TOTAL (UG/L)	ALDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	CHLORDANE, TOTAL (UG/L)
NOV 28...	2.1	<.6	.18	.15	.00	.00	5	.0	.00	.0	.0
MAY 28...	--	--	--	--	.00	--	--	--	--	--	--

DATE	CHLORDANE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDD, TOTAL (UG/L)	DDD, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDE, TOTAL (UG/L)	DDE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDT, TOTAL (UG/L)	DDT, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIAZINON, TOTAL (UG/L)	DIELDRIN TOTAL (UG/L)	DIELDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ENDOSULFAN, TOTAL (UG/L)
NOV 28...	9	.00	25	.00	5.3	.00	5.8	.00	.00	1.3	.00
MAY 28...	--	--	--	--	--	--	--	--	--	--	--

01466500 MCDONALDS BRANCH IN LEBANON STATE FOREST, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	ENDRIN, TOTAL (UG/L)	ENDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ETHION, TOTAL (UG/L)	HEPTACHLOR, TOTAL (UG/L)	HEPTACHLOR, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)	LINDANE TOTAL (UG/L)	LINDANE TOTAL IN BOTTOM MATERIAL (UG/KG)	MALATHION, TOTAL (UG/L)	METHOXYCHLOR, TOTAL (UG/L)	METHOXYCHLOR, TOT. IN BOTTOM MATL. (UG/KG)
NOV 28...	.00	.0	.00	.00	.0	.0	.00	.0	.00	.00	.0
MAY 28...	--	--	--	--	--	--	--	--	--	--	--

DATE	METHYL PARATHION, TOTAL (UG/L)	METHYL TRITHION, TOTAL (UG/L)	MIREX, TOTAL (UG/L)	PARATHION, TOTAL (UG/L)	PERTHANE TOTAL (UG/L)	TOXAPHENE, TOTAL (UG/L)	TOXAPHENE, TOTAL IN BOTTOM MATERIAL (UG/KG)	TOTAL TRITHION (UG/L)	2,4-D, TOTAL (UG/L)	2,4,5-T TOTAL (UG/L)	SILVEX, TOTAL (UG/L)
NOV 28...	.00	.00	.00	.00	.00	0	0	.00	.00	.00	.00
MAY 28...	--	--	--	--	--	--	--	--	--	--	--

01466500 MCDONALDS BRANCH IN LEBANON STATE FOREST, NJ--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	14.0	14.0	14.0	9.5	9.0	9.5	8.0	7.5	8.0	6.0	5.5	6.0
2	14.5	14.0	14.0	10.5	9.5	10.0	7.5	7.0	7.0	6.0	6.0	6.0
3	14.5	14.0	14.5	10.5	10.0	10.5	7.0	6.5	7.0	6.0	5.5	6.0
4	14.5	14.0	14.0	10.0	9.5	9.5	7.0	6.5	7.0	5.5	5.5	5.5
5	14.5	14.0	14.0	9.5	9.0	9.0	7.0	6.5	6.5	5.5	5.5	5.5
6	14.0	13.5	14.0	9.5	8.5	9.0	7.5	6.5	7.0	5.5	5.0	5.5
7	13.5	13.0	13.5	9.5	9.0	9.0	7.5	7.0	7.5	5.5	5.0	5.5
8	13.0	12.5	12.5	9.0	8.5	9.0	7.5	7.0	7.5	5.5	5.5	5.5
9	12.5	12.5	12.5	9.5	9.0	9.5	7.0	7.0	7.0	5.5	5.5	5.5
10	12.5	9.5	11.0	10.0	9.5	10.0	7.0	6.5	7.0	5.5	5.0	5.5
11	9.5	8.5	9.0	10.5	10.0	10.0	7.5	7.0	7.0	6.0	5.5	6.0
12	9.5	8.5	9.0	10.0	9.5	9.5	8.0	7.0	7.5	5.5	4.0	4.5
13	10.0	9.5	10.0	9.5	9.5	9.5	8.0	7.5	8.0	3.5	3.0	3.0
14	9.5	9.0	9.0	9.5	8.5	9.0	8.0	7.0	7.5	4.0	3.0	3.5
15	9.0	8.5	8.5	8.5	8.0	8.0	7.0	6.5	7.0	5.0	4.0	4.5
16	9.5	8.5	9.0	8.5	7.5	8.0	6.5	6.5	6.5	5.0	4.5	5.0
17	9.5	9.0	9.5	8.0	7.5	8.0	6.5	5.5	6.0	5.0	4.5	5.0
18	10.5	9.5	10.0	8.5	8.0	8.0	6.0	5.5	5.5	5.5	5.0	5.0
19	11.0	10.0	10.5	8.5	8.0	8.5	5.5	5.0	5.5	5.5	5.0	5.5
20	11.5	10.5	11.0	9.0	8.5	8.5	5.5	5.5	5.5	5.5	5.0	5.0
21	12.0	11.5	11.5	9.0	8.5	8.5	6.0	5.5	5.5	5.0	4.5	4.5
22	12.5	12.0	12.0	9.5	9.0	9.0	6.0	5.5	6.0	4.5	4.5	4.5
23	13.0	12.5	12.5	10.0	9.5	9.5	6.0	6.0	6.0	4.5	4.5	4.5
24	13.0	12.0	12.5	10.5	10.0	10.5	6.0	6.0	6.0	4.0	3.5	4.0
25	12.0	11.5	11.5	11.0	10.5	11.0	6.5	6.0	6.5	4.0	3.5	3.5
26	11.5	10.5	11.0	12.0	11.0	12.0	6.5	6.0	6.5	4.0	3.5	3.5
27	10.5	10.0	10.0	11.5	11.0	11.5	6.0	6.0	6.0	3.5	3.5	3.5
28	10.0	10.0	10.0	11.0	10.0	11.0	6.0	5.5	6.0	4.0	4.0	4.0
29	10.0	9.5	10.0	10.5	9.5	10.0	6.0	6.0	6.0	4.0	4.0	4.0
30	10.0	9.5	9.5	9.0	8.0	8.5	6.5	6.0	6.5	4.0	4.0	4.0
31	9.5	9.0	9.5	---	---	---	6.5	6.0	6.0	4.0	4.0	4.0
MONTH	14.5	8.5	11.5	12.0	7.5	9.5	8.0	5.0	6.5	6.0	3.0	5.0

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	4.0	4.0	4.0	4.0	3.5	4.0	5.5	4.5	5.0	10.5	10.0	10.0
2	4.0	4.0	4.0	4.5	4.0	4.0	6.0	4.5	5.5	11.5	10.0	11.0
3	4.5	4.0	4.0	5.0	4.0	4.5	6.5	5.5	6.0	12.0	10.5	11.0
4	4.5	4.0	4.0	5.0	4.0	4.5	8.0	6.5	7.5	12.5	11.5	12.0
5	4.5	4.0	4.5	5.5	5.0	5.0	8.0	7.5	7.5	13.0	11.5	12.5
6	4.5	4.0	4.5	5.5	5.0	5.5	8.0	6.5	7.5	13.5	12.5	13.5
7	5.0	4.5	4.5	6.0	5.0	5.5	8.5	7.5	8.0	14.0	13.5	13.5
8	5.0	4.5	4.5	6.0	5.5	6.0	9.5	8.0	8.5	13.5	12.5	13.0
9	5.0	4.5	4.5	6.0	5.5	6.0	10.5	9.0	9.5	12.5	11.5	12.0
10	5.0	4.5	5.0	5.5	5.0	5.5	12.0	10.5	11.0	12.0	11.0	11.5
11	5.0	4.5	4.5	5.0	3.5	4.5	11.5	10.5	11.0	12.0	11.5	11.5
12	5.0	4.5	5.0	4.0	3.5	3.5	11.5	10.0	11.0	12.5	12.0	12.5
13	5.0	4.5	5.0	3.5	2.5	3.5	12.0	11.5	11.5	14.0	13.0	13.5
14	5.0	4.5	5.0	2.5	1.0	1.5	11.5	11.0	11.0	15.0	14.0	14.0
15	5.0	5.0	5.0	1.5	1.0	1.0	12.0	11.5	11.5	14.0	13.0	13.5
16	5.5	4.5	5.0	2.0	1.0	1.5	11.0	9.0	10.5	13.5	12.5	13.0
17	5.0	4.5	4.5	3.5	2.0	2.5	9.0	8.0	8.5	13.5	12.5	13.0
18	5.0	4.5	4.5	4.0	3.5	3.5	8.5	7.5	8.0	13.0	13.0	13.0
19	5.5	4.5	5.0	4.0	3.0	3.5	9.0	8.0	9.0	13.5	13.0	13.5
20	5.5	4.5	5.0	4.5	3.5	4.0	10.0	8.5	9.5	14.0	13.5	14.0
21	6.0	5.0	5.5	5.0	4.5	4.5	11.0	10.0	10.5	14.0	13.5	13.5
22	5.5	5.0	5.5	4.5	3.0	4.0	10.5	9.5	10.0	14.0	13.5	14.0
23	5.0	4.5	5.0	3.5	2.5	3.0	10.0	9.0	9.5	14.5	14.0	14.0
24	4.5	4.0	4.5	4.0	3.0	3.5	10.5	9.5	10.0	15.0	14.5	14.5
25	4.5	4.0	4.0	4.0	3.5	4.0	11.5	10.5	11.0	15.5	14.5	15.0
26	4.0	3.5	4.0	4.0	3.5	4.0	11.0	11.0	11.0	15.0	14.0	14.5
27	4.0	3.5	4.0	4.5	4.0	4.5	10.5	10.5	10.5	14.5	13.5	14.0
28	4.5	4.0	4.0	5.0	4.0	4.5	10.5	10.0	10.5	14.0	13.0	13.5
29	4.5	4.0	4.0	6.0	5.0	5.5	10.5	10.0	10.0	14.0	13.0	13.5
30	---	---	---	6.5	5.5	6.0	10.5	10.0	10.0	13.5	13.0	13.5
31	---	---	---	6.5	5.0	6.0	---	---	---	13.5	13.5	13.5
MONTH	6.0	3.5	4.5	6.5	1.0	4.0	12.0	4.5	9.5	15.5	10.0	13.0

01466500 MCDONALDS BRANCH IN LEBANON STATE FOREST, NJ--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	14.5	13.5	14.0	15.5	15.0	15.5	16.5	16.0	16.0	---	---	---
2	15.0	14.0	14.5	15.5	15.0	15.5	16.5	15.5	16.0	---	---	---
3	15.5	14.5	15.0	15.5	15.0	15.5	16.5	15.5	16.0	---	---	---
4	15.5	15.0	15.0	16.0	15.5	15.5	16.5	16.0	16.0	---	---	---
5	15.5	14.5	14.5	16.0	15.5	15.5	16.5	15.5	16.0	---	---	---
6	15.0	14.0	14.0	16.0	15.0	15.5	16.5	15.5	16.0	---	---	---
7	15.0	14.0	14.5	15.5	15.0	15.0	16.0	15.5	15.5	---	---	---
8	15.5	14.5	14.5	15.0	14.5	15.0	16.5	15.0	15.5	---	---	---
9	15.0	14.0	14.0	15.5	14.5	15.0	16.0	15.5	15.5	---	---	---
10	14.0	13.5	14.0	15.0	14.5	14.5	16.0	15.0	15.5	---	---	---
11	14.0	13.0	13.5	15.5	14.5	15.0	16.0	15.0	15.5	---	---	---
12	13.5	12.5	13.0	15.5	14.5	15.0	16.0	15.0	15.5	---	---	---
13	13.5	12.5	13.0	15.0	14.0	14.5	15.5	15.0	15.0	---	---	---
14	13.5	12.5	13.0	15.0	14.0	14.5	15.5	14.5	15.0	---	---	---
15	13.5	13.0	13.0	15.0	14.0	14.5	15.0	14.5	15.0	---	---	---
16	13.5	13.5	13.5	15.5	14.5	14.5	15.5	14.5	14.5	---	---	---
17	14.0	13.0	13.5	15.0	14.5	15.0	15.0	14.0	14.5	14.0	14.0	14.0
18	13.5	13.0	13.5	15.5	14.5	15.0	14.5	14.0	14.0	14.5	13.5	14.0
19	13.5	13.0	13.0	15.0	14.5	15.0	14.5	14.0	14.0	14.5	13.0	13.5
20	13.5	13.0	13.5	15.5	14.5	15.0	---	---	---	14.5	13.0	13.5
21	14.0	13.0	13.5	15.5	15.0	15.0	---	---	---	14.5	13.5	14.0
22	14.0	13.5	13.5	16.0	15.0	15.5	---	---	---	15.0	14.0	14.0
23	14.0	13.0	13.5	15.5	15.0	15.0	---	---	---	15.0	12.5	14.0
24	14.0	13.5	14.0	15.5	15.0	15.0	---	---	---	14.5	13.5	14.0
25	14.5	13.5	14.0	15.5	14.5	15.0	---	---	---	14.0	13.5	13.5
26	14.0	14.0	14.0	15.0	14.5	14.5	---	---	---	14.5	13.0	14.0
27	14.5	14.0	14.0	15.5	14.5	14.5	---	---	---	13.5	12.0	13.0
28	15.0	14.0	14.5	15.5	14.5	14.5	---	---	---	13.5	12.0	12.5
29	15.0	14.0	14.5	16.5	14.5	15.5	---	---	---	13.5	12.5	13.0
30	15.5	15.0	15.5	17.0	16.0	16.5	---	---	---	13.5	12.5	13.0
31	---	---	---	17.0	16.0	16.5	---	---	---	---	---	---
MONTH	15.5	12.5	14.0	17.0	14.0	15.0	16.5	14.0	15.5	15.0	12.0	13.5
YEAR	17.0	1.0	10.0									

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	25	25	25	30	29	30	48	47	48	48	47	48
2	25	24	25	29	28	29	48	44	46	48	47	47
3	25	23	24	35	29	32	46	43	45	47	46	47
4	26	25	25	35	33	34	46	43	45	46	44	45
5	30	25	26	34	33	34	45	44	44	46	43	44
6	31	30	31	33	32	33	45	43	44	46	43	44
7	30	28	29	33	32	32	47	44	46	45	43	44
8	29	28	28	33	32	32	47	44	46	46	43	45
9	27	26	27	32	31	32	46	44	46	45	43	44
10	40	27	33	33	31	32	46	44	45	45	43	44
11	39	36	37	45	33	37	46	43	45	56	43	46
12	36	34	35	48	44	47	45	43	45	62	58	60
13	37	35	36	48	44	46	49	44	46	64	60	62
14	37	36	36	47	44	46	49	48	48	63	59	61
15	36	35	36	45	43	44	48	44	47	61	59	60
16	36	34	35	44	43	44	47	44	47	59	57	58
17	35	34	34	43	40	42	48	44	47	57	53	54
18	34	34	34	42	41	41	47	44	46	55	53	54
19	34	32	34	42	41	42	46	43	45	58	54	57
20	34	33	33	42	40	41	45	43	44	57	53	55
21	33	32	33	41	40	40	46	43	45	57	53	54
22	33	31	32	42	40	41	46	43	44	54	53	53
23	32	31	32	41	38	40	48	45	46	57	52	55
24	31	30	31	42	39	40	49	48	49	54	50	52
25	31	28	30	41	39	40	55	49	53	51	49	51
26	30	30	30	54	38	47	56	54	55	50	49	49
27	30	30	30	54	50	53	55	53	54	48	47	48
28	30	29	29	54	52	53	54	52	52	48	46	47
29	30	29	29	52	49	50	52	50	51	49	45	46
30	30	29	29	50	48	49	51	49	50	47	45	46
31	30	29	30	---	---	---	50	48	49	46	45	46
MONTH	40	23	31	54	28	40	56	43	47	64	43	51

01466500 MCDONALDS BRANCH IN LEBANON STATE FOREST, NJ--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	46	44	45	42	38	40	56	53	55	52	48	51
2	44	43	44	40	38	38	56	52	54	51	47	49
3	44	40	43	40	38	39	53	52	53	50	48	49
4	43	39	41	39	37	38	53	51	52	48	47	48
5	42	39	40	38	35	38	53	51	52	48	46	47
6	42	39	39	39	38	38	52	50	51	47	45	46
7	41	39	40	39	38	39	51	49	50	46	43	45
8	40	39	40	41	38	39	50	47	49	46	45	46
9	40	39	40	44	41	43	56	47	51	46	43	46
10	40	39	40	46	42	43	57	53	56	46	43	45
11	40	39	40	54	48	51	56	53	55	46	43	44
12	39	37	38	54	48	49	54	51	52	45	44	45
13	39	35	38	56	48	49	51	50	51	45	44	45
14	38	35	37	62	54	59	51	49	50	46	43	44
15	38	35	36	62	57	59	51	47	50	44	42	43
16	40	35	38	58	53	55	52	46	49	43	42	42
17	41	38	39	54	52	53	50	46	48	42	41	42
18	40	38	39	55	52	53	49	47	48	43	41	42
19	41	38	39	53	48	51	50	46	48	42	41	42
20	39	38	38	52	47	48	48	46	47	42	41	42
21	38	35	38	56	47	52	47	45	46	42	41	41
22	45	38	39	57	53	54	47	43	46	42	40	41
23	50	44	47	56	53	54	46	43	45	41	40	41
24	52	48	49	55	53	54	48	45	46	40	39	40
25	53	48	49	58	53	56	47	43	46	40	38	39
26	50	45	48	58	54	56	45	43	45	39	37	38
27	52	44	48	54	53	54	47	45	46	38	37	37
28	45	43	44	54	52	53	50	46	48	37	34	36
29	43	39	42	55	52	53	51	47	50	37	33	35
30	---	---	---	58	52	54	52	48	51	36	33	35
31	---	---	---	56	52	54	---	---	---	36	33	35
MONTH	53	35	41	62	35	49	57	43	50	52	33	43

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	36	34	35	42	38	40	42	38	39	---	---	---
2	35	34	35	40	37	38	38	35	36	---	---	---
3	36	34	35	40	36	38	38	34	35	---	---	---
4	36	33	35	39	38	39	39	36	38	---	---	---
5	36	33	34	39	36	37	36	34	35	---	---	---
6	35	33	34	38	36	37	35	31	34	---	---	---
7	34	33	33	36	34	35	34	31	32	---	---	---
8	34	33	33	35	33	34	33	31	32	---	---	---
9	34	32	33	34	32	33	32	31	32	---	---	---
10	36	33	35	34	32	33	32	31	32	---	---	---
11	36	33	35	33	30	32	32	31	31	---	---	---
12	35	33	34	32	29	31	32	31	32	---	---	---
13	34	33	33	33	30	32	32	31	31	---	---	---
14	33	32	32	32	30	31	32	30	31	---	---	---
15	33	31	32	32	30	32	32	31	31	---	---	---
16	33	32	32	33	30	32	31	30	31	---	---	---
17	33	32	32	34	30	32	31	30	31	26	25	26
18	32	31	32	33	32	33	31	30	31	29	26	28
19	35	31	33	34	33	33	31	30	31	28	26	27
20	35	34	34	33	31	32	---	---	---	27	25	26
21	34	33	34	33	32	32	---	---	---	27	26	27
22	34	33	33	33	32	32	---	---	---	27	26	26
23	34	33	34	34	33	33	---	---	---	27	26	26
24	34	33	33	34	32	33	---	---	---	27	26	26
25	34	32	33	33	31	32	---	---	---	27	26	26
26	33	32	33	32	31	32	---	---	---	27	26	26
27	33	32	32	32	31	32	---	---	---	27	26	26
28	32	31	32	32	31	32	---	---	---	27	26	26
29	39	32	33	48	31	39	---	---	---	27	26	27
30	42	38	40	50	47	48	---	---	---	27	26	27
31	---	---	---	48	41	45	---	---	---	---	---	---
MONTH	42	31	34	50	29	35	42	30	33	29	25	26
YEAR	64	23	41									

01467000 NORTH BRANCH RANCOCAS CREEK AT PEMBERTON, NJ

LOCATION.--Lat 39°58'10", long 74°41'05", Burlington County, Hydrologic Unit 02040202, on right bank at downstream side of bridge on Hanover Street at Pemberton, 12 mi (19 km) upstream from confluence with South Branch.

DRAINAGE AREA.--111 mi² (287 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--September 1921 to current year.

REVISED RECORDS.--WSP 1302: 1922-23. WSP 1382: 1933.

GAGE.--Water-stage recorder above concrete dams. Datum of gage is 31.19 ft (9.507 m) National Geodetic Vertical Datum of 1929. Prior to June 9, 1923, nonrecording gage and June 9, 1923 to Aug. 9, 1951, water-stage recorder at site 600 ft (183 m) downstream at datum 6.54 ft (1.993 m) lower.

REMARKS.--Water-discharge records good. Flow regulated occasionally by operation of gate in dam and by ponds above station.

AVERAGE DISCHARGE.--59 years, 173 ft³/s (4.899 m³/s), 21.17 in/yr (538 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,730 ft³/s (49.0 m³/s) Aug. 31, 1939, gage height, 10.77 ft (3.283 m) from high-water mark at site and datum then in use; minimum daily, 9.0 ft³/s (0.25 m³/s) Sept. 29, 1932.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 600 ft³/s (17.0 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Apr. 10	1545	*670	19.0	2.53	0.771

Minimum discharge, 39 ft³/s (1.10 m³/s) Sept. 13, 14, gage height, 1.43 ft (0.436 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	153	138	173	142	131	126	587	324	102	85	91	55
2	158	131	152	136	125	122	518	334	104	79	83	50
3	181	243	140	133	115	122	491	314	110	76	80	48
4	167	197	133	131	111	124	479	263	116	79	80	47
5	157	192	128	136	107	128	455	224	114	76	88	46
6	182	190	133	136	105	131	380	199	110	78	123	47
7	177	169	159	135	107	128	336	167	109	73	94	48
8	173	146	161	134	107	136	297	160	107	70	80	46
9	152	149	153	128	114	147	380	178	109	70	81	46
10	195	148	145	113	114	147	650	170	130	71	62	45
11	296	166	139	125	113	165	647	163	138	69	58	43
12	338	260	132	241	112	166	605	162	117	65	62	41
13	339	286	141	258	110	183	448	189	115	63	60	41
14	327	287	159	254	109	278	378	189	133	58	56	42
15	279	260	162	271	110	260	468	176	121	58	57	62
16	227	230	157	214	125	235	284	200	108	58	57	55
17	201	204	152	189	138	236	293	238	103	59	55	52
18	194	181	144	182	138	223	269	230	94	59	55	65
19	228	165	139	217	137	234	266	246	89	58	57	60
20	226	160	140	221	129	216	246	210	86	57	58	55
21	204	155	137	204	119	289	229	197	84	55	57	54
22	189	178	140	192	135	387	228	182	80	54	56	52
23	182	160	158	206	159	390	226	170	79	59	55	51
24	199	152	173	196	173	349	207	155	73	58	54	50
25	172	163	196	181	172	466	197	139	73	54	53	54
26	170	178	205	171	162	435	194	134	72	52	48	59
27	163	190	203	161	151	403	196	120	68	52	47	52
28	161	208	186	156	142	353	245	107	66	51	47	50
29	165	227	173	157	136	395	306	111	66	102	48	51
30	156	207	161	150	---	432	321	124	87	119	51	52
31	143	---	152	139	---	467	---	125	---	108	53	---
TOTAL	6254	5720	4826	5409	3706	7873	10826	5900	2963	2125	2006	1519
MEAN	202	191	156	174	128	254	361	190	98.8	68.5	64.7	50.6
MAX	339	287	205	271	173	467	650	334	138	119	123	65
IN	143	131	128	113	105	122	194	107	66	51	47	41
CFSM	1.82	1.72	1.41	1.57	1.15	2.29	3.25	1.71	.89	.62	.58	.46
IN.	2.10	1.92	1.62	1.81	1.24	2.64	3.63	1.98	.99	.71	.67	.51

CAL YR 1979 TOTAL 100750 MEAN 276 MAX 1590 MIN 105 CFSM 2.49 IN 33.76
WTR YR 1980 TOTAL 59127 MEAN 162 MAX 650 MIN 41 CFSM 1.46 IN 19.82

01467000 NORTH BRANCH RANCOCAS CREEK AT PEMBERTON, NJ--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1923-24, 1958, 1962-69, 1975 to current year.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH FIELD (UNITS)	TEMPERATURE, WATER (DEG C)	OXYGEN, DISSOLVED (MG/L)	OXYGEN DEMAND, BIOCHEM UNINHIB 5 DAY (MG/L)	COLIFORM, FECAL, EC BROTH (MPN)	STREPTOCOCCI FECAL (MPN)	HARDNESS (MG/L AS CACO3)
OCT 03...	1345	185	42	4.8	19.0	7.6	1.7	33	230	7
JAN 31...	1100	140	51	4.6	1.0	12.8	.8	<2	12	8
APR 07...	1100	334	45	4.4	11.0	10.8	.4	8	130	5
MAY 21...	1300	202	38	4.9	18.0	8.2	1.5	490	>2400	7
JUL 01...	1245	86	44	5.0	22.0	6.8	2.0	3500	130	8
AUG 12...	0945	61	43	5.3	25.0	6.0	2.6	790	5400	9

DATE	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)
OCT 03...	1.7	.7	2.4	.9	1	0	1	--	5.3	4.0
JAN 31...	1.9	.8	2.8	.7	0	0	0	--	9.1	4.4
APR 07...	1.0	.7	2.0	.7	0	0	0	--	8.6	3.5
MAY 21...	1.5	.7	3.0	.6	1	0	1	.1	6.9	4.1
JUL 01...	1.8	.8	2.6	.8	2	0	2	--	7.6	4.4
AUG 12...	2.1	1.0	2.9	1.0	1	0	1	--	8.2	4.6

DATE	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, ORTHOPHOSPHATE TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT 03...	.1	5.3	34	<1.0	.500	.07	.57	--	.15	10
JAN 31...	.1	4.6	33	.05	<.030	--	.30	.35	.01	5.6
APR 07...	.1	2.3	30	.05	.040	.24	.28	.33	.13	7.0
MAY 21...	.0	3.2	32	.05	.040	.08	.12	.17	.11	8.9
JUL 01...	.1	4.4	35	.10	.100	.51	.61	.71	.04	6.9
AUG 12...	.1	5.7	38	.14	.240	.36	.60	.74	.25	7.3

DATE	TIME	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	BORON, TOTAL RECOVERABLE (UG/L AS B)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)
MAY 21...	1300	130	1	0	20	0	10	3

01467000 NORTH BRANCH RANCOCAS CREEK AT PEMBERTON, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI)	SELE- NIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	PHENOLS (UG/L)
MAY								
21...	1900	8	30	.5	2	0	20	2

01467030 DELAWARE RIVER AT TORRESDALE INTAKE, AT PHILADELPHIA, PA

LOCATION.--Lat 40°01'57", long 74°59'46", Philadelphia County, Hydrologic Unit 02040202, water-quality recorder (40°02'05", 74°59'57") located in inactive building at Torresdale Filter Plant, 1.7 mi (2.7 km) downstream from Poquessing Creek.

DRAINAGE AREA.--7,781 mi² (20,200 km²).

WATER-QUALITY RECORDS

PERIOD OF RECORD.--August 1949 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1963 to current year.
pH: June 1968 to current year.
WATER TEMPERATURES: October 1956 to September 1957, November 1960 to current year.
DISSOLVED OXYGEN: January 1961 to current year.

REMARKS.--Further information on this station is given in U.S. Geological Survey Water-Supply Paper 1809-O.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 865 micromhos Jan. 10, 1977; minimum, 71 micromhos July 24, 1970.
pH: Maximum, 8.1 Dec. 30, 1970; minimum, 4.9 Apr. 5, 1969.
WATER TEMPERATURES: Maximum, 32.5°C July 21, 1977; minimum, freezing point on many days during winter months.
DISSOLVED OXYGEN: Maximum, 14.5 mg/L Feb. 4-5, 1964; minimum, 0.0 mg/L on many days during 1962 and 1965.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 470 micromhos Mar. 8; minimum, 88 micromhos Oct. 10.
pH: Maximum, 7.7 Mar. 10; minimum, 6.1 on many days.
WATER TEMPERATURES: Maximum, 31.5°C, several days in July and August; minimum, 1.5°C on many days during January and February.
DISSOLVED OXYGEN: Maximum 13.1 mg/L Mar.10; minimum 1.9 mg/L Sept. 25.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	20.0	19.0	19.5	14.5	12.5	13.5	10.0	8.5	9.0	5.5	4.5	5.5
2	20.5	19.0	20.0	14.5	13.0	14.0	9.0	6.5	8.0	5.5	5.0	5.0
3	20.5	20.0	20.5	15.0	12.5	13.5	7.5	5.5	7.0	5.5	4.5	5.0
4	20.5	19.5	20.0	13.0	11.5	12.5	7.0	5.5	6.5	5.0	4.0	4.5
5	20.0	18.5	19.5	13.0	12.0	12.5	6.5	5.5	6.0	4.0	3.0	4.0
6	19.0	18.0	18.5	12.5	12.0	12.5	6.0	5.5	5.5	4.5	3.0	4.0
7	18.5	17.0	18.0	12.0	11.0	11.5	8.0	5.5	6.0	3.5	2.5	3.5
8	17.0	16.0	16.5	11.0	10.5	11.0	6.5	5.5	5.5	4.0	3.0	3.5
9	16.0	15.5	16.0	11.5	10.5	10.5	6.5	4.5	5.5	3.5	3.0	3.0
10	15.5	11.0	14.5	13.0	10.5	11.0	6.5	4.5	5.5	3.5	2.0	3.0
11	14.0	12.0	13.5	12.0	10.5	11.0	7.0	5.5	6.0	5.0	2.5	3.5
12	13.5	12.5	13.0	12.0	10.5	11.0	7.0	6.0	6.5	8.0	3.5	4.5
13	13.0	12.5	12.5	11.0	10.5	11.0	8.0	6.5	6.5	4.0	3.0	3.5
14	12.5	11.5	12.0	11.5	10.5	11.0	6.5	6.0	6.5	5.0	3.5	4.0
15	12.5	11.5	12.0	11.0	10.0	11.0	6.5	5.5	6.0	5.5	4.5	5.0
16	12.5	11.5	12.0	11.0	10.0	10.5	6.5	6.0	6.5	5.5	4.5	5.0
17	13.0	12.0	12.5	10.5	9.5	10.5	10.5	5.0	6.5	5.5	5.0	5.0
18	13.5	12.5	13.0	11.0	10.0	10.5	6.0	4.5	5.5	6.0	5.0	5.0
19	14.0	13.0	13.5	11.0	10.0	10.5	5.5	3.5	5.0	7.0	5.0	5.5
20	14.5	13.5	14.0	11.0	10.0	10.5	5.0	4.0	4.5	6.5	5.5	5.5
21	15.5	14.0	14.5	11.0	10.0	10.5	4.5	3.5	4.0	6.0	5.0	5.5
22	16.5	14.5	15.0	11.0	10.0	10.5	4.5	4.0	4.0	5.5	5.0	5.5
23	18.0	15.0	16.0	11.5	10.0	10.5	4.5	4.0	4.0	6.0	5.0	5.5
24	16.5	15.5	16.0	12.5	10.5	11.0	5.0	3.5	4.0	5.0	2.5	4.5
25	15.5	14.5	15.5	13.5	11.0	11.5	9.0	4.0	5.0	4.5	3.5	4.0
26	15.5	14.5	15.0	16.0	11.5	13.0	6.0	4.5	5.0	4.5	3.0	4.0
27	16.0	14.5	15.0	13.5	12.0	12.5	6.0	4.5	5.0	4.0	2.5	3.5
28	15.5	14.5	15.0	14.5	12.5	13.5	6.5	5.5	6.0	4.0	3.5	4.0
29	15.0	13.5	15.0	14.0	10.5	12.0	6.5	5.5	6.0	4.5	3.0	4.0
30	14.5	13.0	14.5	11.5	8.5	10.5	6.5	5.5	6.0	3.5	2.0	3.0
31	14.5	12.5	14.0	---	---	---	6.0	5.0	5.5	3.5	1.5	3.0
MONTH	20.5	11.0	15.5	16.0	8.5	11.5	10.5	3.5	6.0	8.0	1.5	4.5

01467030 DELAWARE RIVER AT TORRESDALE INTAKE, AT PHILADELPHIA, PA--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	2.5	1.5	2.5	4.5	3.0	4.0	---	---	---	---	---	---
2	2.0	1.5	2.0	4.5	3.0	4.0	---	---	---	16.0	13.0	14.0
3	2.5	1.5	1.5	5.0	2.5	3.5	---	---	---	16.5	13.5	14.5
4	3.0	1.5	1.5	5.0	3.0	4.0	---	---	---	17.5	14.5	15.5
5	3.0	1.5	1.5	4.5	3.5	4.0	---	---	---	19.0	16.0	17.0
6	1.5	1.5	1.5	6.5	4.0	4.5	---	---	---	20.5	17.0	18.0
7	2.0	1.5	1.5	6.0	4.0	5.0	14.5	11.0	12.0	21.5	18.0	19.0
8	3.0	1.5	1.5	9.5	5.0	6.0	15.0	11.0	12.0	19.0	18.5	19.0
9	2.0	1.5	1.5	8.5	5.5	6.0	14.0	12.0	12.5	19.5	17.5	19.0
10	2.5	1.5	2.0	11.0	5.5	6.5	15.0	12.5	13.0	19.5	17.5	19.0
11	2.5	1.5	2.0	8.5	6.0	6.5	14.5	13.0	13.5	19.0	18.0	19.0
12	2.5	1.5	2.0	7.0	4.5	6.0	15.0	13.0	13.5	19.0	18.0	19.0
13	2.5	1.5	2.0	7.0	6.0	6.5	14.0	13.0	13.5	19.5	18.5	19.0
14	2.5	1.5	2.5	6.5	3.5	6.0	13.5	12.5	13.0	20.0	18.5	19.0
15	3.5	2.0	2.5	7.5	5.5	6.5	14.5	13.0	13.5	19.5	18.5	19.0
16	3.0	2.0	2.5	8.0	6.0	7.0	13.0	11.5	13.0	20.0	18.5	19.0
17	3.0	2.0	2.5	9.0	7.0	7.5	13.5	11.0	12.0	21.5	19.0	19.5
18	3.0	1.5	2.5	10.0	6.5	8.0	14.0	11.5	11.5	20.0	19.5	19.5
19	3.5	1.5	2.5	9.5	7.0	7.5	14.5	11.0	12.0	21.5	19.0	20.0
20	4.5	2.0	3.0	10.5	7.5	8.5	15.0	11.5	12.5	21.0	20.0	20.0
21	5.5	3.0	3.5	12.5	8.5	9.0	15.0	12.5	13.0	20.0	19.0	20.0
22	4.5	3.5	3.5	9.5	7.5	8.0	15.0	13.0	13.5	21.5	19.0	20.0
23	6.0	3.5	4.5	7.5	5.0	6.5	16.0	13.5	14.0	22.5	20.0	21.0
24	7.0	4.5	5.0	7.5	4.5	5.0	16.0	14.5	15.5	22.0	21.0	21.5
25	5.5	4.5	5.0	8.5	5.0	6.5	16.5	15.5	16.0	22.5	21.5	22.0
26	5.0	4.0	4.5	7.5	6.0	6.5	16.0	15.5	16.0	22.5	21.0	22.0
27	4.5	3.5	4.5	8.5	6.0	6.5	---	---	---	22.0	21.0	22.0
28	5.0	3.5	4.5	8.0	6.5	7.0	---	---	---	22.5	21.5	22.0
29	4.5	2.5	4.5	10.5	7.0	7.5	---	---	---	23.5	22.0	22.5
30	---	---	---	10.0	7.5	8.5	---	---	---	23.0	22.0	22.5
31	---	---	---	9.0	5.5	8.5	---	---	---	23.0	22.5	23.0
MONTH	7.0	1.5	3.0	12.5	2.5	6.5	16.5	11.0	13.5	23.5	13.0	19.5

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	24.5	22.5	23.5	28.0	26.0	27.0	---	---	---	30.5	28.0	29.0
2	25.0	23.5	24.0	29.0	26.5	27.0	---	---	---	30.5	28.5	29.0
3	26.0	24.0	24.5	27.5	27.0	27.5	---	---	---	30.0	28.0	29.0
4	25.0	23.0	24.5	29.0	27.0	27.5	---	---	---	29.5	28.0	29.0
5	25.5	23.0	24.0	29.0	27.5	28.0	---	---	---	29.0	28.0	29.0
6	25.0	23.5	24.0	28.5	26.5	28.0	30.5	29.5	30.5	29.5	28.5	29.0
7	26.0	23.5	24.5	28.0	26.0	27.5	31.0	30.0	30.5	29.0	28.0	29.0
8	25.5	24.5	25.0	27.5	26.5	27.0	31.0	30.5	30.5	29.0	27.5	28.5
9	24.5	23.0	24.0	28.0	27.0	27.5	31.5	30.0	30.5	29.0	27.5	28.0
10	23.5	22.0	23.5	28.5	27.5	28.0	31.5	30.0	31.0	28.5	27.5	211
11	23.5	22.5	23.0	28.5	27.5	28.0	31.5	30.5	31.0	28.5	26.5	27.5
12	24.0	22.5	23.5	29.0	27.5	28.0	31.0	30.0	30.5	28.5	26.0	27.0
13	24.5	23.0	23.5	29.0	27.5	28.0	31.5	29.5	30.5	28.5	26.5	27.5
14	25.0	23.0	24.0	29.5	27.5	28.5	31.0	29.5	30.0	27.5	27.0	27.0
15	25.5	23.5	24.0	29.5	27.5	28.5	30.0	29.5	30.0	27.5	26.5	27.0
16	24.5	23.5	24.0	30.0	27.5	28.5	30.0	28.5	29.5	26.5	25.5	26.0
17	25.0	22.5	24.0	30.0	27.5	28.5	30.0	28.0	29.0	26.0	24.5	25.5
18	24.5	23.5	24.0	30.0	28.5	29.0	28.5	27.5	28.5	25.5	23.0	25.0
19	25.5	23.0	24.0	30.5	28.5	29.0	28.5	27.5	28.0	25.5	24.0	25.0
20	24.0	23.0	24.0	31.5	29.0	29.5	28.5	27.5	28.0	25.5	24.0	25.0
21	24.5	22.5	23.5	31.5	29.5	30.0	28.0	27.0	27.5	25.5	24.5	25.0
22	25.0	23.0	24.0	31.0	29.5	30.0	27.5	26.0	27.0	26.0	25.0	25.5
23	25.5	23.5	24.5	30.0	28.5	29.5	28.0	26.5	27.5	26.0	25.0	25.5
24	25.5	24.5	25.0	30.0	29.0	29.5	28.0	27.0	27.5	25.5	24.0	25.0
25	26.0	25.0	25.5	30.5	29.5	29.5	28.5	27.5	28.0	25.0	23.5	24.5
26	26.0	25.0	25.5	30.5	29.5	30.0	29.0	27.5	28.0	24.5	23.5	24.0
27	27.0	25.5	26.0	31.0	29.5	30.0	29.0	28.0	28.5	23.5	22.0	23.0
28	27.5	26.0	26.5	30.5	29.5	30.0	29.5	28.0	28.5	23.5	22.0	23.0
29	28.0	26.0	26.5	30.5	28.5	29.5	29.0	28.0	28.5	22.5	21.5	22.5
30	27.5	26.5	26.5	---	---	---	29.5	28.0	28.5	22.5	21.5	22.0
31	---	---	---	---	---	---	30.0	28.0	28.5	---	---	---
MONTH	28.0	22.0	24.5	31.5	26.0	28.5	31.5	26.0	29.0	30.5	21.5	26.5
YEAR	31.5	1.5	15.5									

01467030 DELAWARE RIVER AT TORRESDALE INTAKE, AT PHILADELPHIA, PA--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	179	144	162	213	184	194	135	97	105	186	147	156
2	169	147	158	257	183	196	167	101	114	194	148	155
3	231	147	158	252	182	193	143	110	119	200	150	157
4	185	145	156	210	184	192	152	117	124	181	151	158
5	221	126	146	210	188	196	162	125	132	188	155	163
6	193	113	125	208	179	189	155	129	136	241	159	170
7	139	101	111	219	150	178	297	138	158	277	160	174
8	145	94	107	180	135	151	237	144	157	251	166	185
9	222	89	105	180	131	144	208	147	159	226	168	182
10	187	88	104	261	132	156	217	152	164	245	173	187
11	206	95	117	229	140	154	210	156	167	255	174	187
12	264	122	137	209	145	161	207	158	170	279	180	201
13	194	130	144	203	151	161	272	163	179	226	190	205
14	207	136	149	212	158	168	232	170	182	245	199	211
15	189	138	152	209	161	171	208	172	180	259	204	214
16	204	148	159	219	165	174	218	177	186	260	200	212
17	227	153	164	215	168	176	209	163	188	242	197	206
18	218	157	167	221	172	181	215	184	190	287	194	205
19	231	162	169	224	175	184	210	184	190	272	194	206
20	225	165	176	229	179	188	209	189	194	221	193	201
21	228	170	179	216	181	188	226	187	194	219	195	200
22	248	173	183	219	183	191	220	186	194	216	185	196
23	278	176	188	230	186	195	263	187	201	224	184	193
24	265	176	189	239	189	198	289	193	210	219	184	189
25	222	175	185	238	190	199	330	195	214	200	182	187
26	216	177	186	243	190	202	259	201	214	212	183	190
27	220	180	190	212	188	197	246	202	213	225	185	194
28	218	185	192	224	172	193	216	193	200	226	187	197
29	245	191	200	173	112	140	229	179	193	249	190	211
30	234	192	199	136	98	107	203	160	177	245	215	222
31	217	187	196	---	---	---	193	150	164	249	219	226
MONTH	278	88	160	261	98	177	330	97	173	287	147	192

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	245	219	224	291	263	270	---	---	---	---	---	---
2	250	221	228	291	262	269	---	---	---	182	132	142
3	263	224	232	365	262	275	---	---	---	246	130	142
4	268	228	238	347	263	278	---	---	---	193	130	139
5	279	231	240	385	262	280	---	---	---	182	133	142
6	273	230	242	382	265	282	---	---	---	225	138	151
7	287	236	244	322	264	275	257	132	158	225	129	145
8	290	238	248	470	262	283	265	131	153	229	132	144
9	287	241	250	375	265	281	267	129	145	172	136	143
10	292	246	254	399	263	279	191	134	150	177	139	146
11	306	245	261	280	244	269	200	138	149	183	142	149
12	300	253	266	298	270	280	229	118	142	205	145	155
13	308	262	274	303	272	278	183	105	123	240	151	165
14	299	268	276	454	276	312	216	112	124	194	158	165
15	296	268	274	369	263	289	212	116	130	198	166	170
16	324	266	275	310	258	271	183	122	131	197	166	173
17	296	268	276	311	243	261	189	125	136	209	169	176
18	299	268	275	297	231	243	167	120	131	222	166	175
19	288	264	272	268	226	234	171	119	129	204	168	175
20	283	263	270	291	206	224	230	122	133	231	171	178
21	292	256	270	237	169	199	183	124	133	220	170	177
22	287	254	268	223	135	156	225	128	138	203	171	178
23	300	188	268	153	94	125	199	132	145	232	176	186
24	316	260	272	237	91	107	219	138	149	222	184	192
25	282	262	268	197	93	125	210	142	154	247	189	198
26	294	263	271	227	110	129	224	147	159	229	193	200
27	322	265	274	230	119	139	---	---	---	230	194	200
28	295	265	273	209	119	135	---	---	---	232	195	201
29	290	264	271	251	119	145	---	---	---	223	196	201
30	---	---	---	215	131	147	---	---	---	216	197	201
31	---	---	---	195	137	147	---	---	---	216	198	202
MONTH	324	188	260	470	91	225	267	105	141	247	129	170

01467030 DELAWARE RIVER AT TORRESDALE INTAKE, AT PHILADELPHIA, PA--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	258	202	209	263	249	254	---	---	---	290	251	259
2	256	206	213	350	251	259	---	---	---	389	253	263
3	253	210	217	274	253	257	---	---	---	290	253	260
4	252	214	221	269	254	258	---	---	---	283	254	262
5	251	217	224	281	256	260	---	---	---	283	260	265
6	247	222	228	269	251	258	242	228	237	282	257	263
7	259	225	233	264	253	256	246	237	241	279	259	256
8	274	232	238	264	251	254	261	239	245	279	259	267
9	257	233	238	265	249	255	272	243	249	279	258	266
10	242	230	233	276	246	257	263	247	251	283	256	264
11	246	228	233	274	244	257	271	247	252	280	255	264
12	244	226	232	273	240	253	259	235	246	276	253	260
13	244	225	231	268	237	248	253	241	245	292	253	262
14	244	226	231	258	234	244	254	241	246	298	254	264
15	260	229	236	305	235	246	255	240	245	295	251	260
16	276	228	235	270	236	244	255	238	244	272	246	255
17	246	227	233	269	234	240	256	235	242	269	245	255
18	267	227	235	260	235	243	245	229	236	251	167	237
19	257	227	232	265	237	245	252	230	236	249	230	239
20	259	227	232	296	239	247	256	229	237	258	237	242
21	249	227	232	271	242	249	257	228	236	253	242	246
22	257	229	235	304	237	248	288	229	236	262	247	251
23	274	231	238	253	238	241	256	230	239	273	249	257
24	291	235	242	244	236	239	269	233	242	273	247	254
25	271	238	244	256	238	244	265	236	244	283	245	257
26	268	240	246	260	242	247	270	239	248	275	244	254
27	285	243	250	257	244	249	270	244	252	262	241	250
28	295	246	253	263	246	251	283	248	256	267	242	251
29	277	247	254	259	214	248	269	248	256	269	237	249
30	279	248	252	---	---	---	299	248	257	264	239	250
31	---	---	---	---	---	---	304	250	260	---	---	---
MONTH	295	202	234	350	214	250	304	228	245	389	167	256
YEAR	470	88	208									

OXYGEN, DISSOLVED (DO), MG/L, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	8.8	6.9	7.5	8.7	5.9	7.8	10.6	9.4	10.2	12.0	11.0	11.6
2	7.7	6.7	7.0	8.9	5.9	8.1	11.1	10.1	10.7	12.0	11.4	11.7
3	7.0	4.0	6.7	9.0	4.8	8.3	11.5	10.8	11.2	12.1	11.6	11.8
4	7.4	5.9	6.8	9.6	8.3	9.0	11.8	10.4	11.4	12.1	11.6	11.9
5	7.6	3.8	6.9	9.6	9.0	9.4	11.9	10.2	11.5	12.2	11.8	12.0
6	8.1	6.2	7.6	9.6	8.4	9.1	12.1	10.3	11.6	12.3	11.3	12.0
7	8.1	6.5	7.7	10.1	8.3	9.3	12.1	9.8	11.7	12.6	11.9	12.3
8	8.5	7.8	8.2	10.2	8.6	9.7	12.3	11.2	12.0	12.5	11.8	12.3
9	8.7	8.3	8.5	10.5	9.1	10.0	12.2	11.7	12.1	12.4	10.6	11.9
10	10.0	6.5	8.6	10.5	6.1	9.9	12.2	11.7	12.0	12.5	11.9	12.2
11	9.5	7.8	8.4	10.4	8.1	9.9	12.0	9.7	11.6	12.7	12.1	12.4
12	---	---	---	10.4	7.4	9.8	11.7	8.8	10.9	12.6	9.6	12.0
13	---	---	---	10.3	8.3	9.9	11.5	5.8	10.4	12.5	11.9	12.3
14	---	---	---	10.1	8.7	9.8	11.5	10.0	11.0	12.6	12.2	12.4
15	9.8	8.6	9.5	10.0	8.6	9.7	11.6	9.4	11.1	12.6	10.9	12.3
16	9.9	6.6	9.3	10.1	8.6	9.7	11.5	11.0	11.3	12.3	10.4	11.9
17	9.8	8.3	9.3	10.0	8.2	9.6	12.1	10.8	11.2	12.0	10.9	11.7
18	9.8	7.9	9.3	10.1	9.4	9.7	11.5	11.1	11.2	12.0	10.5	11.7
19	9.6	5.2	9.0	10.1	8.9	9.7	11.7	11.1	11.4	12.0	10.8	11.7
20	9.3	6.5	8.7	10.1	7.9	9.6	11.9	11.2	11.6	12.0	11.2	11.7
21	9.2	8.3	8.9	10.0	7.8	9.3	11.9	10.8	11.5	12.0	11.6	11.8
22	9.1	7.4	8.8	10.1	7.4	9.2	11.9	9.5	11.4	12.0	11.1	11.6
23	8.8	7.7	8.5	10.2	7.5	9.4	12.0	10.4	11.5	11.7	10.5	11.3
24	8.7	7.5	8.4	10.0	6.6	9.2	12.2	11.5	11.8	11.7	10.7	11.4
25	8.7	6.1	8.2	10.0	7.9	9.4	12.3	9.7	11.8	11.7	11.2	11.4
26	8.5	5.4	7.8	10.0	4.4	8.9	12.4	11.2	12.0	11.8	11.2	11.5
27	8.3	5.7	7.6	9.9	7.0	9.2	12.4	11.0	12.1	12.0	11.4	11.6
28	8.3	7.7	7.9	9.9	8.4	9.4	12.1	10.6	11.6	11.7	11.2	11.5
29	8.0	5.4	7.4	9.8	8.5	9.4	11.6	11.0	11.4	12.1	11.3	11.6
30	8.3	7.2	7.8	10.3	9.1	9.8	11.8	11.3	11.5	12.2	11.5	11.8
31	8.5	5.9	7.7	---	---	---	11.9	10.9	11.6	12.3	11.3	11.9
MONTH	10.0	3.8	8.1	10.5	4.4	9.4	12.4	5.8	11.4	12.7	9.6	11.9

01467030 DELAWARE RIVER AT TORRESDALE INTAKE, AT PHILADELPHIA, PA--Continued

OXYGEN, DISSOLVED (DO), MG/L, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	12.6	11.7	12.1	11.5	10.8	11.2	---	---	---	---	---	---
2	12.7	12.0	12.4	11.5	10.9	11.2	---	---	---	9.9	9.6	9.8
3	12.7	12.2	12.5	11.8	10.9	11.2	---	---	---	9.8	9.3	9.6
4	12.8	12.1	12.5	11.7	10.7	11.2	---	---	---	9.6	9.1	9.4
5	12.7	12.3	12.5	11.9	10.9	11.3	---	---	---	9.3	8.8	9.1
6	12.6	12.0	12.4	11.8	10.9	11.3	---	---	---	9.0	8.2	8.8
7	12.7	12.3	12.5	11.6	11.0	11.2	11.1	10.4	10.8	8.9	7.5	8.5
8	12.8	12.2	12.5	12.5	10.8	11.2	11.1	10.3	10.8	8.4	7.1	8.0
9	12.8	12.2	12.4	11.6	10.6	11.1	10.9	9.1	10.4	7.8	6.7	7.4
10	12.7	12.1	12.4	13.1	10.9	11.3	10.5	9.4	10.1	9.0	7.2	8.1
11	12.6	12.1	12.4	11.7	10.2	11.2	10.1	9.4	9.7	8.4	7.7	8.1
12	12.5	12.0	12.3	11.5	11.0	11.4	10.2	9.4	9.9	8.2	7.5	7.8
13	12.7	12.0	12.3	11.5	11.1	11.3	10.3	9.5	10.0	8.3	6.3	7.6
14	12.3	11.8	12.1	12.1	10.9	11.3	10.2	9.6	10.0	8.2	7.5	7.8
15	12.4	11.8	12.0	11.3	10.7	10.9	10.0	9.6	9.8	7.9	7.5	7.7
16	12.1	11.1	11.8	11.1	10.6	10.7	10.0	9.6	9.8	7.6	7.0	7.4
17	12.1	11.5	11.8	11.3	10.5	10.7	10.3	9.8	10.0	7.3	6.4	6.9
18	12.1	11.5	11.8	11.2	10.6	10.9	10.6	9.9	10.2	7.5	6.4	7.0
19	12.3	11.6	11.9	11.5	10.7	11.1	10.6	10.0	10.4	7.1	6.3	6.6
20	12.0	11.5	11.7	11.7	10.4	10.9	10.6	9.3	10.4	7.1	5.8	6.4
21	12.0	11.2	11.6	11.0	7.6	10.3	10.6	9.7	10.3	7.3	6.3	6.6
22	11.7	11.3	11.5	11.3	10.3	10.9	10.4	9.0	10.1	7.0	6.1	6.6
23	11.5	11.0	11.3	12.1	10.9	11.4	10.5	9.0	9.8	7.1	6.1	6.5
24	12.1	10.8	11.1	12.5	11.6	12.2	9.9	8.8	9.5	7.2	6.0	6.6
25	11.8	10.8	11.1	12.4	8.9	11.9	9.6	8.5	9.1	7.4	6.2	6.8
26	11.7	10.8	11.2	12.2	11.4	11.9	9.2	8.2	8.8	7.8	6.5	7.1
27	12.0	10.8	11.2	12.2	11.5	11.9	---	---	---	8.3	6.9	7.6
28	11.8	11.0	11.3	12.2	11.4	11.9	---	---	---	8.7	7.0	7.9
29	11.6	10.9	11.2	12.1	10.3	11.7	---	---	---	9.3	6.9	8.3
30	---	---	---	11.8	10.8	11.5	---	---	---	9.2	7.3	8.2
31	---	---	---	11.7	11.0	11.4	---	---	---	8.2	7.3	7.8
MONTH	12.8	10.8	11.9	13.1	7.6	11.3	11.1	8.2	10.0	9.9	5.8	7.7

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	8.2	6.3	7.4	5.7	3.1	4.5	---	---	---	6.8	4.5	5.2
2	8.3	6.1	7.4	7.1	3.3	4.8	---	---	---	7.4	4.0	5.3
3	7.7	6.4	7.1	5.2	3.5	4.3	---	---	---	7.0	4.2	5.4
4	7.2	5.8	6.5	4.6	2.5	3.6	---	---	---	7.3	4.5	5.7
5	6.8	5.4	6.1	5.3	2.8	3.7	---	---	---	6.6	3.7	5.7
6	7.1	5.1	5.9	5.0	3.0	3.9	5.3	4.2	4.9	6.4	3.5	5.6
7	6.3	4.3	5.6	6.2	3.4	4.4	5.5	4.1	4.7	6.3	4.1	5.6
8	6.2	4.1	5.2	6.6	3.3	5.3	5.4	3.3	4.5	6.4	4.0	5.5
9	6.7	5.1	5.8	6.5	3.5	5.3	5.5	3.4	4.6	6.7	4.0	5.7
10	7.0	4.9	5.9	6.3	2.3	4.9	5.6	3.1	4.7	6.8	4.6	5.8
11	7.2	4.8	6.4	5.8	2.7	4.7	6.2	3.6	4.9	6.9	4.1	5.8
12	8.0	4.7	6.8	5.7	2.8	4.7	6.2	3.3	5.0	6.7	4.2	5.6
13	8.4	5.2	7.4	6.1	3.1	4.9	6.5	3.6	5.2	6.1	3.7	5.1
14	8.4	6.0	7.5	6.9	3.7	5.2	7.0	3.7	5.5	5.9	4.2	4.9
15	7.9	6.1	7.3	7.8	3.9	5.7	6.8	4.7	5.5	5.2	4.0	4.5
16	7.6	5.9	7.0	7.4	5.0	6.1	6.8	3.8	5.4	6.1	3.5	4.7
17	7.8	5.8	6.9	6.3	4.7	5.5	6.5	4.3	5.4	6.2	4.1	5.1
18	8.2	5.4	6.9	6.0	3.4	5.1	6.8	4.6	5.6	5.7	4.3	5.1
19	7.6	6.0	6.9	5.7	3.7	5.0	6.5	4.5	5.4	5.4	4.0	4.9
20	7.9	5.8	6.8	6.4	3.2	5.1	6.8	2.9	5.2	5.3	3.7	4.8
21	7.5	5.9	6.7	7.1	3.5	5.2	6.8	2.6	5.1	5.1	4.3	4.8
22	7.4	5.6	6.4	7.1	3.8	5.4	6.3	3.2	5.0	4.8	4.0	4.3
23	7.9	5.6	6.5	5.5	3.4	5.1	6.5	2.7	5.0	4.9	3.3	4.2
24	8.3	5.4	6.7	5.4	3.7	4.6	7.0	3.2	5.2	5.3	2.5	4.5
25	8.1	5.3	6.7	5.3	2.4	4.3	6.8	3.5	5.5	5.2	1.9	4.1
26	7.2	4.9	6.5	5.5	2.2	4.4	6.7	3.2	5.4	5.5	2.2	4.3
27	6.8	3.8	5.8	5.7	2.9	4.7	6.7	3.0	5.2	6.2	3.7	4.9
28	6.8	4.2	5.6	6.0	3.3	5.1	6.7	2.8	4.9	6.5	3.1	5.0
29	6.2	3.5	5.3	5.9	3.6	4.9	6.3	3.1	4.8	7.4	3.9	5.6
30	6.0	3.7	4.8	---	---	---	6.2	3.1	4.6	7.1	4.5	5.7
31	---	---	---	---	---	---	6.8	3.9	4.9	---	---	---
MONTH	8.4	3.5	6.5	7.8	2.2	4.8	7.0	2.6	5.1	7.4	1.9	5.1
YEAR	13.1	1.9	8.6									

01467030 DELAWARE RIVER AT TORRESDALE INTAKE, AT PHILADELPHIA, PA--Continued

PH (STANDARD UNITS), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	6.5	6.4	6.5	6.9	6.7	6.7	6.2	6.1	6.2	7.1	6.8	7.0
2	6.7	6.4	6.5	6.9	6.7	6.7	6.3	6.2	6.2	6.9	6.7	6.8
3	6.7	6.6	6.7	6.8	6.7	6.7	6.2	6.1	6.2	6.7	6.6	6.7
4	6.7	6.6	6.7	6.7	6.6	6.7	6.2	6.1	6.2	---	---	---
5	6.8	6.6	6.6	6.8	6.6	6.7	6.2	6.1	6.2	---	---	---
6	6.7	6.6	6.7	6.7	6.6	6.7	6.2	6.1	6.1	---	---	---
7	6.6	6.5	6.6	6.8	6.6	6.6	6.4	6.2	6.2	---	---	---
8	6.7	6.5	6.6	6.8	6.5	6.6	6.4	6.2	6.2	---	---	---
9	6.8	6.5	6.6	6.6	6.5	6.5	6.3	6.1	6.2	---	---	---
10	6.6	6.4	6.5	6.8	6.4	6.5	6.3	6.1	6.2	---	---	---
11	7.0	6.4	6.7	6.8	6.3	6.5	6.7	6.1	6.4	---	---	---
12	7.1	6.8	6.9	6.9	6.5	6.6	6.7	6.6	6.6	---	---	---
13	6.9	6.7	6.9	6.6	6.5	6.6	6.8	6.6	6.7	---	---	---
14	7.1	6.9	6.9	6.9	6.5	6.6	6.7	6.6	6.7	---	---	---
15	7.0	6.4	6.7	6.7	6.6	6.6	6.7	6.6	6.7	---	---	---
16	6.7	6.6	6.6	6.9	6.6	6.7	6.8	6.6	6.7	---	---	---
17	6.7	6.6	6.6	6.8	6.6	6.6	6.8	6.5	6.7	---	---	---
18	6.7	6.5	6.6	6.7	6.6	6.6	6.7	6.5	6.6	---	---	---
19	6.9	6.6	6.6	6.9	6.5	6.6	6.6	6.4	6.5	---	---	---
20	6.8	6.6	6.6	6.7	6.5	6.6	6.6	6.4	6.5	---	---	---
21	6.8	6.6	6.6	6.7	6.6	6.6	6.4	6.3	6.4	---	---	---
22	6.7	6.6	6.6	6.6	6.5	6.6	6.4	6.2	6.3	---	---	---
23	6.9	6.6	6.6	6.6	6.5	6.6	6.3	6.2	6.2	---	---	---
24	6.8	6.6	6.6	6.7	6.6	6.6	6.3	6.1	6.2	---	---	---
25	7.1	6.7	6.8	6.7	6.5	6.6	6.6	6.1	6.3	---	---	---
26	7.1	6.7	6.8	6.7	6.6	6.7	6.5	6.2	6.4	---	---	---
27	7.1	6.7	6.8	6.8	6.6	6.7	6.5	6.3	6.4	---	---	---
28	6.9	6.7	6.8	6.9	6.7	6.8	6.5	6.2	6.3	---	---	---
29	7.0	6.7	6.7	6.8	6.4	6.5	6.5	6.3	6.4	---	---	---
30	6.9	6.7	6.7	6.4	6.2	6.3	6.4	6.3	6.4	---	---	---
31	6.8	6.7	6.7	---	---	---	7.2	6.2	6.8	---	---	---
MONTH	7.1	6.4	6.7	6.9	6.2	6.6	7.2	6.1	6.4	7.1	6.6	6.8

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	---	---	---	7.5	7.4	7.4	---	---	---	---	---	---
2	---	---	---	7.5	7.4	7.4	---	---	---	7.2	7.1	7.2
3	---	---	---	7.5	7.4	7.4	---	---	---	7.3	7.1	7.2
4	---	---	---	7.5	7.4	7.4	---	---	---	7.2	7.0	7.1
5	---	---	---	7.5	7.4	7.4	---	---	---	7.2	7.1	7.1
6	7.1	7.0	---	7.5	7.4	7.4	---	---	---	7.3	7.1	7.2
7	7.2	7.0	7.1	7.5	7.4	7.4	7.3	7.1	7.2	7.2	6.7	7.1
8	7.3	7.0	7.1	7.5	7.1	7.4	7.3	7.1	7.2	7.1	7.0	7.1
9	7.2	7.0	7.1	7.4	7.3	7.4	7.2	7.0	7.1	7.2	7.0	7.1
10	7.3	7.0	7.1	7.7	7.3	7.4	7.1	7.0	7.1	7.3	6.9	7.1
11	7.1	6.7	6.9	7.4	7.1	7.4	7.1	7.0	7.1	7.2	7.1	7.1
12	7.0	6.7	6.8	7.5	7.4	7.4	7.2	6.9	7.1	7.1	7.0	7.1
13	6.9	6.8	6.8	7.6	7.4	7.5	7.1	7.0	7.0	7.1	7.0	7.0
14	6.9	6.8	6.8	7.5	7.3	7.4	7.2	7.0	7.1	7.2	7.0	7.1
15	7.0	6.8	6.9	7.4	7.2	7.4	7.2	7.0	7.1	7.1	7.1	7.1
16	6.9	6.8	6.9	7.4	7.3	7.4	7.2	7.1	7.1	7.1	7.0	7.1
17	7.0	6.7	6.9	7.4	7.3	7.4	7.2	7.1	7.1	7.1	6.8	7.0
18	7.0	6.8	6.9	7.4	7.3	7.3	7.2	7.0	7.1	7.1	7.0	7.0
19	7.0	6.7	6.9	7.3	7.2	7.3	7.1	7.0	7.1	7.0	6.9	7.0
20	7.1	6.7	6.9	7.4	7.2	7.2	7.2	6.9	7.1	7.1	6.9	7.0
21	7.3	6.8	7.0	7.2	7.0	7.2	7.2	7.1	7.1	7.1	7.0	7.0
22	7.4	6.9	7.1	7.2	7.0	7.1	7.2	7.1	7.1	7.1	7.0	7.0
23	7.3	7.2	7.3	7.1	6.9	7.0	7.3	7.1	7.2	7.1	7.0	7.0
24	7.4	7.3	7.3	7.1	6.8	6.9	7.3	7.1	7.2	7.1	6.9	7.0
25	7.4	7.3	7.3	7.1	6.9	7.0	7.3	7.1	7.1	7.1	7.0	7.0
26	7.4	7.2	7.4	7.2	6.9	7.0	7.2	6.8	7.1	7.2	7.0	7.1
27	7.6	7.3	7.4	7.2	7.0	7.1	---	---	---	7.2	7.0	7.1
28	7.5	7.3	7.4	7.2	7.0	7.1	---	---	---	7.3	7.0	7.2
29	7.5	7.3	7.4	7.2	6.9	7.1	---	---	---	7.4	7.0	7.2
30	---	---	---	7.2	7.1	7.1	---	---	---	7.4	7.1	7.2
31	---	---	---	7.2	7.1	7.2	---	---	---	7.2	7.1	7.1
MONTH	7.6	6.7	7.1	7.7	6.8	7.3	7.3	6.8	7.1	7.4	6.7	7.1

01467030 DELAWARE RIVER AT TORRESDALE INTAKE, AT PHILADELPHIA, PA--Continued

PH (STANDARD UNITS), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	7.2	7.0	7.1	6.9	6.6	6.8	---	---	---	6.6	6.4	6.4
2	7.3	6.9	7.1	7.1	6.7	6.9	---	---	---	6.7	6.3	6.4
3	7.2	7.0	7.1	6.9	6.7	6.8	---	---	---	6.6	6.3	6.4
4	7.1	6.9	7.0	6.8	6.7	6.8	---	---	---	6.9	6.4	6.6
5	7.1	6.9	7.0	6.9	6.7	6.8	---	---	---	6.8	6.6	6.7
6	7.1	6.9	7.0	6.8	6.7	6.7	6.6	6.5	6.5	6.8	6.5	6.7
7	7.0	6.9	7.0	6.9	6.7	6.8	6.6	6.5	6.5	6.8	6.6	6.6
8	7.0	6.8	6.9	7.0	6.7	6.9	6.6	6.4	6.5	6.7	6.5	6.6
9	7.0	6.9	6.9	7.0	6.7	6.9	6.6	6.4	6.5	6.8	6.5	6.6
10	7.1	6.8	7.0	6.9	6.7	6.8	6.6	6.4	6.5	6.8	6.5	6.7
11	7.1	6.9	7.0	6.9	6.6	6.8	6.6	6.4	6.5	6.8	6.5	6.6
12	7.2	6.9	7.1	6.9	6.6	6.7	6.7	6.4	6.6	6.9	6.6	6.7
13	7.3	6.9	7.1	6.9	6.6	6.8	6.7	6.4	6.6	6.9	6.6	6.7
14	7.2	7.0	7.1	6.9	6.6	6.8	6.8	6.5	6.6	7.0	6.6	6.7
15	7.2	7.0	7.1	7.2	6.7	6.8	6.7	6.5	6.6	6.8	6.6	6.7
16	7.1	6.9	7.0	7.1	6.8	6.9	6.7	6.4	6.5	6.9	6.6	6.7
17	7.1	6.9	7.0	6.9	6.7	6.8	6.7	6.4	6.5	7.0	6.6	6.8
18	7.2	6.9	7.0	6.8	6.6	6.7	6.7	6.5	6.6	6.8	6.5	6.7
19	7.1	6.9	7.0	6.8	6.6	6.7	6.7	6.5	6.5	6.7	6.6	6.7
20	7.2	6.9	7.0	6.9	6.6	6.7	6.7	6.4	6.5	6.7	6.6	6.7
21	7.0	6.9	7.0	7.0	6.6	6.7	6.7	6.4	6.5	6.7	6.6	6.6
22	7.0	6.8	6.9	6.9	6.6	6.8	6.7	6.4	6.5	6.6	6.5	6.6
23	7.1	6.8	6.9	6.8	6.6	6.7	6.6	6.3	6.5	6.7	6.5	6.6
24	7.2	6.8	7.0	6.7	6.6	6.7	6.7	6.3	6.5	6.7	6.5	6.6
25	7.2	6.9	7.0	6.7	6.5	6.6	6.7	6.4	6.5	6.7	6.5	6.6
26	7.1	6.8	7.0	6.7	6.5	6.6	6.6	6.3	6.5	6.8	6.5	6.7
27	7.0	6.7	6.9	6.8	6.5	6.7	6.6	6.3	6.5	6.8	6.6	6.7
28	7.0	6.8	6.9	6.8	6.6	6.7	6.6	6.3	6.4	6.9	6.6	6.7
29	6.9	6.7	6.9	6.8	6.6	6.7	6.6	6.3	6.4	7.1	6.6	6.8
30	6.9	6.7	6.8	---	---	---	6.6	6.3	6.4	7.0	6.6	6.8
31	---	---	---	---	---	---	6.7	6.4	6.4	---	---	---
MONTH	7.3	6.7	7.0	7.2	6.5	6.8	6.8	6.3	6.5	7.1	6.3	6.7
YEAR	7.7	6.1	6.8									

01467060 DELAWARE RIVER AT PALMYRA, NJ

LOCATION.--Lat 40°01'05", long 75°02'16", Philadelphia County, PA, Hydrologic Unit 02040202, on right bank opposite Palmyra, 0.5 mi (0.8 km) upstream from Tacony-Palmyra Bridge, 3.5 mi (5.6 km) downstream from Rancocas Creek, and at channel mile 107.45 (172.89 km).

DRAINAGE AREA.--7,850 mi² (20,330 km²).

PERIOD OF RECORD.--December 1962 to current year. Tidal volumes published from December 1962 to September 1970.

GAGE.--Water-stage recorder. Datum of gage is -10.00 ft (-3.048 m) National Geodetic Vertical Datum of 1929. Gage-height record converted to elevation above or below (-) National Geodetic Vertical Datum of 1929 for publication.

REMARKS.--Summaries for months with short periods of no gage-height record have been estimated with negligible or no loss of accuracy unless otherwise noted. Some periods cannot be estimated and are noted by dash (--) lines.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 6.92 ft (2.109 m) Apr. 15, 1979; minimum, -8.6 ft (-2.6 m) Dec. 31, 1962.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum elevation known since 1899, 8.9 ft (2.7 m) Aug. 24, 1933, from profile furnished by Corps of Engineers, U.S. Army.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 6.92 ft (2.109 m) Apr. 15; minimum recorded, -4.00 ft (-1.219 m) Jan. 27.

Summaries of tide elevations during current year are as follows:

TIDE ELEVATIONS, IN FEET, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

		OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
Maximum	Elevation	6.36	6.35	5.46	6.37	5.31	4.61	6.92	5.57	5.19	5.41	5.59	--
high tide	Date	5	26	20	17	16	4	15	14	8	28-30	22	--
Minimum	Elevation	-2.87	-3.17	-3.00	-4.00	-3.30	--	-3.15	--	--	-2.99	-2.99	--
low tide	Date	10	16	17	27	15,17	--	16	--	--	27	17	--
Mean high tide		4.86	4.54	4.02	4.07	3.75	--	5.04	--	--	--	4.50	--
Mean water level		1.56	1.32	0.85	0.94	0.68	--	1.74	--	--	--	1.26	--
Mean low tide		-2.01	-2.18	-2.42	-2.26	-2.42	--	-1.76	--	--	--	-2.33	--

NOTE.--Missing or doubtful record on Mar. 14-31, Apr. 27 to May 9, June 14 to July 8, Sept. 1-30.

01467069 NORTH BRANCH PENNSAUKEN CREEK NEAR MOORESTOWN, NJ

LOCATION.--Lat 39°57'07", long 74°58'10", Burlington County, Hydrologic Unit 02040202, at bridge on Kings Highway, 200 ft (61 m) downstream from outlet of Strawbridge Lake, 0.6 mi (1.0 km) northwest of Moorestown Mall, 0.8 mi (1.3 km) southeast of Lenola, and 1.8 mi (2.9 km) southwest of Moorestown.

DRAINAGE AREA.--12.8 mi² (33.2 km²).

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1976 to current year.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIOCHEM UNINHIB 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)	HARD-NESS (MG/L AS CACO3)
OCT 10...	1000	155	232	7.0	11.0	9.2	3.4	3500	>2400	55
FEB 05...	1130	6.6	352	6.9	3.0	14.1	1.2	2	<2	95
MAR 24...	1115	19	209	6.6	8.0	10.3	2.7	11	140	56
MAY 19...	1130	8.8	257	6.6	18.5	6.9	3.0	240	240	71
JUL 17...	0915	36	293	7.0	27.0	5.6	7.1	790	270	83
AUG 19...	1355	1.6	270	7.0	22.5	6.1	6.2	70	230	77
SEP 30...	0910	1.4	312	7.0	18.0	8.0	8.3	80	20	77

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)
OCT 10...	15	4.3	11	4.1	15	0	12	--	38	18
FEB 05...	26	7.3	21	5.6	24	0	19	--	74	37
MAR 24...	15	4.5	13	4.1	12	0	10	--	43	22
MAY 19...	19	5.8	17	3.7	17	0	14	.0	49	27
JUL 17...	22	6.7	16	6.6	28	0	23	--	60	26
AUG 19...	21	5.9	13	6.0	17	0	14	--	57	23
SEP 30...	21	6.0	18	7.4	63	0	52	--	54	27

DATE	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, ORTHOPH OSPHATE TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT 10...	.2	8.0	118	<1.0	.660	.18	.84	--	.44	4.4
FEB 05...	.3	14	201	1.0	1.600	.20	1.8	2.8	.01	3.4
MAR 24...	.2	8.8	151	1.0	.400	4.3	4.7	5.7	.49	5.3
MAY 19...	.2	10	153	.74	.460	1.4	1.9	2.6	1.4	7.2
JUL 17...	.3	9.8	190	.35	.600	3.0	3.6	4.0	1.3	6.1
AUG 19...	.3	11	174	.26	E.460	--	1.6	1.9	.70	6.5
SEP 30...	.3	9.3	178	.56	1.100	1.0	2.1	2.7	.83	8.3

01467069 NORTH BRANCH PENNSAUKEN CREEK NEAR MOORESTOWN, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	BORON, TOTAL RECOVERABLE (UG/L AS B)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)
MAY								
19...	1130	30	4	0	30	0	10	5

DATE	IRON, TOTAL RECOVERABLE (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	PHENOLS (UG/L)
MAY								
19...	6600	16	210	.1	14	0	30	3

01467081 SOUTH BRANCH PENNSAUKEN CREEK AT CHERRY HILL, NJ

LOCATION.--Lat 39°56'30", long 75°00'05", Camden County, Hydrologic Unit 02040202, on left bank on downstream wingwall of bridge on Mill Road in Cherry Hill, 1.1 mi (1.8 km) south of Maple Shade and 3.8 mi (6.1 km) upstream from confluence with the North Branch.

DRAINAGE AREA.--9.16 mi² (23.72 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1967 to September 1976, October 1977 to current year.

GAGE.--Water-stage recorder. Datum of gage is 8.12 ft (2.475 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Water-discharge records fair.

AVERAGE DISCHARGE.--12 years, (water years 1968-76, 1978-80) 18.9 ft³/s (0.535 m³/s), 28.01 in/yr (711 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 868 ft³/s (24.6 m³/s) Aug. 28, 1978, gage height, 10.19 ft (3.106 m); maximum gage height, 11.34 ft (3.456 m) Aug. 28, 1971; minimum discharge, 2.6 ft³/s (0.073 m³/s) Oct. 6, 9, 10, 11, 1970, gage height, 1.71 ft (0.521 m).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 285 ft³/s (8.07 m³/s) Apr. 9, gage height, 6.10 ft (1.859 m), no peak above base of 300 ft³/s (8.50 m³/s); minimum, 2.9 ft³/s (0.082 m³/s) Sept. 28, 29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	66	10	12	11	11	9.2	110	64	8.0	6.6	8.4	4.5
2	25	10	11	11	11	8.4	30	21	15	5.6	7.2	4.0
3	68	48	11	11	9.6	8.5	21	16	20	17	11	4.2
4	17	19	11	11	9.0	8.6	70	14	12	7.6	17	5.0
5	21	13	11	11	9.2	13	29	13	7.3	6.9	12	6.2
6	18	12	16	11	9.1	10	19	14	6.9	10	36	4.9
7	14	12	29	13	9.0	9.2	17	13	8.0	5.2	11	4.6
8	14	11	14	14	9.9	13	15	24	8.5	5.0	7.6	4.9
9	16	11	12	12	9.0	15	113	13	7.7	4.9	6.2	5.1
10	117	13	12	11	8.8	12	56	11	15	11	5.8	5.0
11	37	30	12	42	8.9	22	23	12	6.9	5.4	5.7	4.6
12	28	52	12	103	9.0	10	18	21	6.6	4.9	10	4.8
13	26	20	28	30	8.5	41	16	30	6.2	4.6	6.6	4.7
14	18	24	19	15	8.6	100	20	13	5.9	4.9	6.1	4.7
15	15	16	13	13	8.8	22	24	11	8.7	4.9	6.8	5.0
16	14	15	13	13	23	15	16	10	14	13	6.4	4.8
17	13	14	16	12	12	14	14	9.6	6.4	13	6.0	4.9
18	12	13	13	15	9.6	19	14	23	6.1	5.8	6.4	43
19	12	13	13	46	9.4	13	13	14	6.0	5.1	6.8	5.7
20	12	12	14	17	9.3	12	13	20	6.0	5.0	6.1	4.7
21	11	12	14	13	9.8	117	14	32	5.5	5.1	5.5	4.4
22	12	12	18	15	19	45	14	15	5.3	6.3	5.0	4.7
23	11	11	19	28	27	22	13	11	5.5	15	5.0	4.5
24	18	12	18	15	14	20	13	9.9	6.1	6.9	4.3	4.1
25	12	12	32	12	12	120	12	9.1	5.5	5.1	4.5	10
26	11	45	18	12	11	37	12	8.1	5.2	4.9	4.7	5.5
27	11	22	15	11	9.6	18	22	8.1	5.1	4.6	4.6	4.0
28	14	15	13	12	9.4	15	37	7.8	4.9	4.8	4.4	3.7
29	12	14	12	13	8.9	64	31	7.5	12	23	5.0	3.9
30	11	12	12	12	---	32	36	8.0	30	13	4.5	4.0
31	11	---	11	12	---	169	---	7.2	---	7.4	5.0	---
TOTAL	697	535	474	577	323.4	1033.9	855	490.3	266.3	242.5	241.6	184.1
MEAN	22.5	17.8	15.3	18.6	11.2	33.4	28.5	15.8	8.88	7.82	7.79	6.14
MAX	117	52	32	103	27	169	113	64	30	23	36	43
MIN	11	10	11	11	8.5	8.4	12	7.2	4.9	4.6	4.3	3.7
CFSM	2.46	1.94	1.67	2.03	1.22	3.65	3.11	1.73	.97	.85	.85	.67
IN.	2.83	2.17	1.92	2.34	1.31	4.20	3.47	1.99	1.08	.98	.98	.75

CAL YR 1979 TOTAL 8534.2 MEAN 23.4 MAX 461 MIN 6.7 CFSM 2.56 IN 34.65
WTR YR 1980 TOTAL 5920.1 MEAN 16.2 MAX 169 MIN 3.7 CFSM 1.77 IN 24.04

01467081 SOUTH BRANCH PENNSAUKEN CREEK AT CHERRY HILL, NJ--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1970-73, 1975 to current year.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIOCHEM UNINHIB 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)	HARD-NESS (MG/L AS CACO3)
OCT 04...	1030	19	269	6.4	19.0	6.9	8.6	4900	3300	70
JAN 22...	1100	12	321	7.0	5.0	10.0	7.5	>2400	350	83
APR 07...	1200	17	290	7.0	12.5	9.4	2.7	490	140	86
JUN 11...	1245	6.7	305	7.2	16.5	6.4	7.5	1300	>2400	80
JUL 17...	1300	7.9	235	7.1	25.0	4.5	9.0	16000	16000	60
AUG 19...	1210	5.3	325	7.5	21.5	5.1	7.0	16000	2400	86
SEP 30...	1130	3.4	425	7.5	18.0	5.0	6.0	160000	1100	81

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)
OCT 04...	19	5.4	13	5.8	28	0	23	--	66	17
JAN 22...	22	6.9	23	6.2	45	0	37	--	57	31
APR 07...	23	6.9	16	5.2	35	0	29	--	55	24
JUN 11...	21	6.7	25	7.7	68	0	56	.0	43	21
JUL 17...	16	4.8	12	6.3	44	0	36	--	38	14
AUG 19...	23	6.9	29	11	90	0	74	--	48	30
SEP 30...	22	6.4	36	11	100	0	82	--	46	34

DATE	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, ORTHOPH OSPHATE TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT 04...	.2	13	159	2.0	5.200	--	--	--	1.1	16
JAN 22...	.2	14	212	2.9	E1.600	--	E1.9	--	2.0	--
APR 07...	.2	12	182	2.6	.820	1.4	2.2	4.8	1.4	5.5
JUN 11...	.2	14	196	2.4	2.100	2.1	4.2	6.6	2.7	6.7
JUL 17...	.2	9.0	144	1.3	1.500	1.3	2.8	4.1	2.4	8.5
AUG 19...	.3	16	223	2.4	4.000	1.8	5.8	8.2	5.7	5.2
SEP 30...	.4	16	237	2.3	3.700	1.5	5.2	7.5	7.0	9.1

DATE	TIME	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE)	BORON, TOTAL RECOV-ERABLE (UG/L AS B)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)
JUN 11...	1245	10	2	0	170	0	10	8

01467081 SOUTH BRANCH PENNSAUKEN CREEK AT CHERRY HILL, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	PHENOLS (UG/L)
JUN								
11...	2000	6	120	.2	6	0	30	1

01467120 COOPER RIVER AT NORCROSS ROAD AT LINDENWOLD, NJ

LOCATION.--Lat 39°49'43", long 74°58'55", Camden County, Hydrologic Unit 02040202, at bridge on Norcross Road in Lindenwold, 50 ft (15 m) downstream from outflow of Linden Lake, 1.1 mi (1.8 km) southwest of Gibbstown, and 1.7 mi (2.8 km) south of Glendale.

DRAINAGE AREA.--1.13 mi^2 (2.93 km^2).

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1976 to current year.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIOCHEM UNINHIB 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)	HARD-NESS (MG/L AS CACO3)
FEB 04...	1100	.91	82	7.0	4.5	14.1	1.0	<2	<2	23
APR 22...	0920	1.1	77	7.0	15.5	9.5	--	<20	11	19
JUN 12...	1000	.91	65	6.8	18.0	8.7	1.8	50	--	19
JUL 15...	1030	.50	68	7.1	26.0	7.6	2.1	11	46	22
AUG 11...	0900	.30	76	6.9	26.5	5.6	1.8	20	240	22
SEP 22...	1000	.20	78	7.2	24.5	6.7	2.8	49	5	24

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)
FEB 04...	7.2	1.2	5.1	1.3	13	0	11	--	13	8.8
APR 22...	5.7	1.1	5.4	1.4	12	0	10	--	11	8.6
JUN 12...	6.1	1.0	4.0	.9	17	0	14	.5	7.1	6.2
JUL 15...	6.9	1.1	3.3	.9	34	0	28	--	5.4	6.4
AUG 11...	6.8	1.1	3.5	1.3	22	0	18	--	5.5	6.7
SEP 22...	8.0	1.0	3.9	1.8	--	--	--	.0	5.5	6.9

DATE	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, ORTHOPH OSPHATE TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
FEB 04...	.1	1.4	51	E.12	E.160	--	E.60	--	<.01	--
APR 22...	.1	2.0	50	.27	.100	.16	.26	.53	.03	5.8
JUN 12...	.1	1.3	48	.22	.340	.42	.76	.98	.13	5.9
JUL 15...	.1	1.4	60	<.05	.140	.46	.60	--	.12	6.3
AUG 11...	.1	5.2	68	<.05	.340	.59	.93	--	.18	7.5
SEP 22...	.1	.4	74	<.05	.040	.58	.62	--	.09	6.8

01467120 COOPER RIVER AT NORCROSS ROAD AT LINDENWOLD, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	BORON, TOTAL RECOVERABLE (UG/L AS B)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)
JUN 12...	1000	40	0	0	20	0	10	1
SEP 22...	1000	20	2	0	40	0	10	2

DATE	IRON, TOTAL RECOVERABLE (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	PHENOLS (UG/L)
JUN 12...	2300	4	30	.2	2	0	10	1
SEP 22...	840	2	30	<.1	2	0	20	0

01467130 COOPER RIVER AT KIRKWOOD, NJ

LOCATION.--Lat 39°50'11", long 75°00'06", Camden County, Hydrologic Unit 02040202, at outlet of Kirkwood Lake in Kirkwood, 100 ft (30 m) east of tracks of Pennsylvania-Reading Seashore Lines, and 1.0 mi (1.6 km) north of Laurel Springs.

DRAINAGE AREA.--5.14 mi² (13.31 km²).

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1964, 1967, 1976 to current year.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIOCHEM UNINHIB 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)
JAN 29...	1330	321	7.2	5.0	11.9	7.9	<2	<2	47	14
APR 22...	1045	285	8.1	18.0	11.7	--	3500	49	40	12
JUN 12...	1145	293	7.4	19.5	7.3	9.6	150	--	43	13
JUL 15...	1230	377	7.8	26.5	8.8	8.2	<20	2	49	15
AUG 11...	1040	332	7.6	28.5	7.3	9.4	490	540	46	14
SEP 29...	1050	455	8.1	18.0	11.3	8.2	110	39	56	17

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
JAN 29...	2.9	27	6.9	71	0	58	--	24	41	.1
APR 22...	2.5	25	5.9	66	0	54	--	20	34	.1
JUN 12...	2.6	26	6.0	81	0	66	--	16	34	.1
JUL 15...	2.9	33	8.8	83	0	68	--	16	50	.2
AUG 11...	2.7	28	8.0	74	0	61	--	20	42	.2
SEP 29...	3.3	40	11	100	0	82	.0	24	67	.2

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, ORTHOPH OSPHATE TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
JAN 29...	8.3	147	.32	E8.300	--	9.9	10	1.4	13
APR 22...	6.0	138	.38	5.900	--	E7.8	--	.10	6.2
JUN 12...	7.2	142	.30	6.000	12	18	18	1.5	10
JUL 15...	8.8	190	.30	7.200	4.8	12	12	1.6	8.8
AUG 11...	6.0	154	.35	4.400	3.5	7.9	8.2	1.6	13
SEP 29...	.1	208	.35	9.900	6.1	16	16	1.0	11

DATE	TIME	NITRO-GEN, NH4 + ORG. TOT IN BOT MAT (MG/KG AS N)	CARBON, INOR-GANIC, TOT IN BOT MAT (G/KG AS C)	CARBON, INORG + ORGANIC TOT. IN BOT MAT (G/KG AS C)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC TOTAL IN BOT-TOM MA-TERIAL (UG/G AS AS)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE)	BORON, TOTAL RECOV-ERABLE (UG/L AS B)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CD)
SEP 29...	1050	600	.1	4.3	990	4	0	0	350	0	<10

01467130 COOPER RIVER AT KIRKWOOD, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	CHRO-MIUM, RECOV. FM BOT-TOM MA-TERIAL (UG/G)	COBALT, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, RECOV. FM BOT-TOM MA-TERIAL (UG/G)
SEP 29...	10	<10	<10	5	<10	1100	1600	10	20	50	8

DATE	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MERCURY RECOV. FM BOT-TOM MA-TERIAL (UG/G AS HG)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	NICKEL, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, TOTAL IN BOT-TOM MA-TERIAL (UG/G)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS ZN)	PHENOLS (UG/L)	PCB, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	PCN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)
SEP 29...	<.1	.00	6	<10	0	0	20	25	2	22	.0

DATE	ALDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	CHLOR-DANE, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	DDD, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	DDE, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	DDT, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	DI-AZINON, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	DI-ELDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	ENDO-SULFAN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	ENDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	ETHION, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	HEPTA-CHLOR, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)
SEP 29...	.0	12	9.8	.0	1.0	.0	.7	.0	.0	.0	.0

DATE	HEPTA-CHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)	LINDANE TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	MALA-THION, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	METH-OXY-CHLOR, TOT. IN BOTTOM MATL. (UG/KG)	METHYL PARA-THION, TOT. IN BOTTOM MATL. (UG/KG)	METHYL TRI-THION, TOT. IN BOTTOM MATL. (UG/KG)	MIREX, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	PARA-THION, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	PER-THANE IN BOTTOM MATERIL (UG/KG)	TOXA-PHENE, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	TRI-THION, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)
SEP 29...	.0	.0	.0	.0	.0	.0	.0	.0	.00	0	.0

01467140 COOPER RIVER AT LAWNSIDE, NJ

LOCATION.--Lat 39°52'14", long 75°00'59", Camden County, Hydrologic Unit 02040202, at bridge on Woodcrest Road in Lawnside, 0.2 mi (0.3 km) upstream from the New Jersey Turnpike, and 1.7 mi (2.7 km) upstream from Tindale Run.

DRAINAGE AREA.--12.8 mi² (33.2 km²).

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1964-65, 1976 to current year.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIOCHEM UNINHIB 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)	HARD-NESS (MG/L AS CACO3)
OCT 03...	1300	160	148	6.3	21.5	9.6	7.2	24000	>24000	36
JAN 29...	1100	4.0	305	7.1	5.5	9.2	14	220	130	52
APR 07...	0900	7.1	236	7.1	13.0	--	9.0	130	49	52
JUN 11...	1030	4.2	304	7.2	17.0	5.5	9.6	310	230	46
JUL 17...	1030	2.3	350	7.5	23.5	3.3	13	800	3500	56
AUG 20...	1045	2.6	360	7.3	22.5	4.3	7.7	13000	700	56
SEP 22...	1215	--	425	7.2	24.0	1.7	8.3	4900	35000	57

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)
OCT 03...	10	2.6	6.9	4.5	28	0	23	.0	20	10
JAN 29...	15	3.6	24	8.0	72	0	59	--	31	30
APR 07...	15	3.5	15	5.2	54	0	44	--	28	20
JUN 11...	13	3.2	28	7.3	83	0	68	--	24	31
JUL 17...	16	4.0	28	9.3	98	0	80	--	25	33
AUG 20...	16	3.9	30	10	104	0	85	--	30	39
SEP 22...	17	3.6	34	11	--	--	--	.0	28	41

DATE	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, ORTHOPH OSPHATE TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT 03...	.2	5.8	90	.55	2.300	--	--	--	1.5	8.0
JAN 29...	.2	12	152	.66	E7.400	--	9.2	9.9	5.0	18
APR 07...	.2	9.7	128	.64	3.400	2.6	6.0	6.6	3.3	13
JUN 11...	.2	11	147	.55	5.200	1.1	6.3	6.8	4.0	11
JUL 17...	.3	13	177	.24	6.700	2.3	9.0	9.2	5.6	9.7
AUG 20...	.3	15	187	.69	6.200	1.1	7.3	8.0	6.4	8.5
SEP 22...	.3	12	215	.25	7.300	.50	7.8	8.0	5.1	11

01467140 COOPER RIVER AT LAWNSIDE, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	ALUMINUM, DIS-SOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	BORON, TOTAL RECOVERABLE (UG/L AS B)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)
OCT 03...	1300	40	5	10	60	0	20	11
SEP 22...	1215	20	5	0	280	4	10	15

DATE	IRON, TOTAL RECOVERABLE (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	PHENOLS (UG/L)
OCT 03...	7300	34	70	<.5	7	0	60	1
SEP 22...	2700	9	80	.1	5	0	30	1

01467150 COOPER RIVER AT HADDONFIELD, NJ

LOCATION.--Lat 39°54'11", long 75°01'19", Camden County, Hydrologic Unit 02040202, on right bank of Wallworth Lake in Pennypacker Park, 200 ft (61 m) upstream from bridge on State Highway 41 (Kings Highway) in Haddonfield, 0.6 mi (1.0 km) upstream from North Branch Cooper River, and 7.7 mi (12.4 km) upstream from mouth.

DRAINAGE AREA.--17.4 mi^2 (45.1 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1963 to current year.

REVISED RECORDS.--WRD-NJ 1969: 1967(M).

GAGE.--Water-stage recorder above concrete dam. Datum of gage is 9.29 ft (2.832 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Water-discharge records good. Occasional regulation at low flow from Kirkwood Lake, other small lakes and wastewater treatment plants.

AVERAGE DISCHARGE.--17 years, 35.9 ft^3/s (1.017 m^3/s), 28.02 in/yr (712 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,300 ft^3/s (93.5 m^3/s) Aug. 28, 1971, gage height, 5.46 ft (1.664 m); minimum, 0.8 ft^3/s (0.023 m^3/s) Nov. 13, 1972, gage height, 1.07 ft (0.326 m) regulation from unknown source; minimum daily, 1.2 ft^3/s (0.034 m^3/s) June 27, 1964.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 407 ft^3/s (11.5 m^3/s) Apr. 9, gage height, 2.47 ft (0.753 m), no peaks above base of 500 ft^3/s (14.2 m^3/s); minimum, 11 ft^3/s (0.312 m^3/s) Sept. 13, gage height, 1.35 ft (0.411 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	99	30	27	26	24	24	286	195	35	26	23	22
2	50	35	27	25	23	25	96	47	34	20	19	14
3	108	78	28	25	22	26	47	35	48	33	45	13
4	40	46	27	25	24	27	171	32	39	24	56	14
5	47	34	27	27	25	32	82	31	27	20	40	14
6	39	31	32	27	26	30	43	30	25	20	91	14
7	33	31	52	28	27	28	39	29	26	17	24	14
8	29	30	29	29	25	33	38	43	37	17	18	15
9	34	30	27	28	24	42	202	34	28	17	16	15
10	194	32	28	27	25	35	138	28	46	44	15	14
11	85	52	27	67	27	42	50	29	30	20	16	14
12	50	90	26	143	29	30	40	40	23	17	27	14
13	47	40	42	38	26	72	39	84	21	16	17	13
14	36	43	35	32	24	227	47	34	19	16	16	14
15	33	35	28	29	26	55	54	28	20	16	17	16
16	31	33	27	29	43	36	38	27	37	23	16	15
17	30	30	30	27	30	33	36	26	24	22	15	22
18	31	31	26	39	26	38	35	53	21	27	16	60
19	32	33	27	73	25	31	35	44	20	17	16	20
20	33	33	28	33	23	30	34	88	19	17	16	18
21	33	33	28	29	26	187	34	81	17	16	14	16
22	33	32	30	35	45	122	33	41	17	18	14	16
23	34	32	32	43	58	45	33	32	18	34	14	16
24	36	32	32	30	33	43	31	29	18	40	13	16
25	31	31	49	29	30	212	29	29	18	22	14	21
26	30	75	33	27	28	48	29	26	18	20	13	22
27	29	49	28	27	26	36	48	24	18	16	13	18
28	33	37	26	28	26	34	58	24	17	17	13	16
29	33	34	26	27	26	123	58	24	37	56	15	16
30	32	29	26	26	---	75	88	25	89	29	14	16
31	31	---	26	25	---	209	---	25	---	20	15	---
TOTAL	1436	1181	936	1103	822	2030	1991	1317	846	717	671	528
MEAN	46.3	39.4	30.2	35.6	28.3	65.5	66.4	42.5	28.2	23.1	21.6	17.6
MAX	194	90	52	143	58	227	286	195	89	56	91	60
MIN	29	29	26	25	22	24	29	24	17	16	13	13
CFSM	2.66	2.26	1.74	2.05	1.63	3.76	3.82	2.44	1.62	1.33	1.24	1.01
IN.	3.07	2.52	2.00	2.36	1.76	4.34	4.26	2.82	1.81	1.53	1.43	1.13

CAL YR 1979 TOTAL 17811 MEAN 48.8 MAX 711 MIN 20 CFSM 2.81 IN 38.08
WTR YR 1980 TOTAL 13578 MEAN 37.1 MAX 286 MIN 13 CFSM 2.13 IN 29.03

01467190 COOPER RIVER AT CAMDEN, NJ

LOCATION.--Lat 39°55'35", long 75°05'03", Camden County, Hydrologic Unit 02040202, at bridge on U.S. Routes 130 and 30 in Camden, 3.4 mi (5.5 km) upstream from mouth, 3.5 mi (5.6 km) northwest of Haddonfield, and 3.7 mi (6.0 km) downstream from North Branch Cooper River.

DRAINAGE AREA.--35.2 mi^2 (91.2 km^2).

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1970-71, 1976 to current year.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH FIELD (UNITS)	TEMPERATURE, WATER (DEG C)	OXYGEN, DISSOLVED (MG/L)	OXYGEN DEMAND, BIOCHEM UNINHIB 5 DAY (MG/L)	COLIFORM, FECAL, EC BROTH (MPN)	STREPTOCOCCI FECAL (MPN)	HARDNESS (MG/L AS CACO3)	CALCIUM DISSOLVED (MG/L AS CA)
OCT 17...	1100	244	7.0	12.0	4.6	3.5	500	80	61	17
FEB 04...	1400	360	7.4	1.0	8.9	7.0	80	<20	75	21
APR 14...	1000	192	6.9	15.0	5.1	3.9	200	40	47	13
JUN 02...	1000	296	7.4	25.0	6.2	6.6	<20	<20	54	14
JUL 29...	1230	297	8.5	28.0	11.5	13	790	1300	60	17
AUG 20...	0850	322	7.5	23.5	4.3	6.6	310	20	61	17
SEP 29...	1340	372	7.9	19.0	7.8	6.8	>2400	175	66	19

DATE	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)
OCT 17...	4.4	14	5.7	56	0	46	.0	32	19	.2
FEB 04...	5.4	27	8.5	90	0	74	--	39	34	.3
APR 14...	3.5	12	4.1	41	0	34	--	25	16	.2
JUN 02...	4.5	24	6.8	81	0	66	--	34	27	.3
JUL 29...	4.3	23	7.9	68	1	57	--	24	27	.3
AUG 20...	4.6	23	7.9	83	0	68	--	34	28	.3
SEP 29...	4.5	28	9.8	107	0	88	--	32	33	.3

DATE	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, ORTHOPHOSPHATE TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT 17...	11	142	12	3.200	.50	3.7	16	1.5	8.6
FEB 04...	15	195	E1.5	7.400	.10	7.5	--	4.1	--
APR 14...	7.5	105	.84	1.900	1.9	3.8	4.6	2.2	6.8
JUN 02...	11	172	.62	4.500	.50	5.0	5.6	.96	9.1
JUL 29...	11	171	.34	4.000	2.3	6.3	6.6	1.0	8.2
AUG 20...	11	160	.29	4.000	2.5	6.5	6.8	.95	7.8
SEP 29...	12	204	.28	6.500	2.7	9.2	9.5	1.1	8.9

01467190 COOPER RIVER AT CAMDEN, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	BORON, TOTAL RECOVERABLE (UG/L AS B)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)
OCT								
17...	1100	30	3	0	100	0	20	8

DATE	IRON, TOTAL RECOVERABLE (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	PHENOLS (UG/L)
OCT								
17...	2300	16	110	.3	3	0	20	0

01467200 DELAWARE RIVER AT BENJAMIN FRANKLIN BRIDGE, AT PHILADELPHIA, PA

LOCATION.--Lat 39°57'11", long 75°08'05", Philadelphia County, Hydrologic Unit 02040202, at center of river on a line 200 ft (61 m) upstream of bridge from the north side of pier 12 north through channel station +14.3 to pierhead line on New Jersey side of river.

DRAINAGE AREA.--7,993 mi^2 (20,700 km^2).

WATER-QUALITY RECORDS

PERIOD OF RECORD.--August 1949 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: November 1963 to current year.
pH: October 1967 to current year.
WATER TEMPERATURES: November 1960 to current year.
DISSOLVED OXYGEN: November 1960 to current year.

REMARKS.--Water-quality recorder (30°57'10", 75°08'18") located at river end of pier 11 north about 100 ft(30 m) downstream from bridge. Further information on this station is given in U.S. Geological Survey Water-Supply Paper 1809-O. Interruptions in the record were due to malfunctions of the instrument.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 1,450 micromhos Nov. 20, 1964; minimum, 65 micromhos Sept. 15, 1979.
pH: Maximum, 8.7 Oct. 14, 1979; minimum, 4.7 Dec. 29, 1978.
WATER TEMPERATURES: Maximum, 31.0°C July 13-15, 1966; minimum, 0.0°C on many days during winter months.
DISSOLVED OXYGEN: Maximum, 14.1 mg/L Dec. 14, 1962; minimum, 0.0 mg/L on many days each year.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 496 micromhos Sept. 30; minimum, 68 micromhos Oct. 2.
pH: Maximum, 8.7 Oct. 14; minimum, 5.5 Mar. 24.
WATER TEMPERATURES: Maximum, 29.0°C on several days during August; minimum, 2.0°C on many days during February.
DISSOLVED OXYGEN: Maximum 12.3 mg/L Mar. 24 and 25; minimum 0.0 mg/L Aug. 1, 2.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	19.5	19.0	19.5	14.5	14.0	14.0	11.5	10.0	10.5	6.0	5.5	5.5
2	19.5	19.0	19.5	14.5	14.0	14.5	10.5	9.0	9.5	6.0	5.5	5.5
3	19.5	19.0	19.5	14.5	13.5	14.5	9.0	8.0	8.5	6.0	5.5	5.5
4	20.0	19.5	19.5	14.0	13.0	13.5	9.0	7.5	8.5	5.5	5.0	5.5
5	20.0	19.0	19.5	13.5	12.5	13.0	8.0	7.0	7.5	5.5	4.5	5.0
6	19.0	18.0	18.5	13.0	12.5	12.5	7.5	7.0	7.5	5.0	4.5	4.5
7	18.5	17.0	18.0	12.5	12.0	12.5	7.5	6.5	7.0	5.0	4.0	4.5
8	17.5	16.5	17.0	12.5	12.0	12.0	7.0	6.0	6.5	4.5	4.0	4.5
9	16.5	15.5	16.5	12.0	11.5	12.0	6.5	6.0	6.0	4.5	4.0	4.5
10	15.5	15.0	15.5	12.0	11.5	12.0	6.0	5.5	6.0	4.5	4.0	4.0
11	14.5	14.0	14.0	12.0	11.0	11.5	6.5	6.0	6.0	5.0	4.0	4.5
12	14.0	13.5	13.5	11.5	11.0	11.5	6.5	6.0	6.5	5.0	4.0	4.5
13	13.5	13.0	13.0	11.5	11.0	11.0	6.5	6.5	6.5	4.5	4.0	4.0
14	13.0	12.0	12.5	11.5	10.5	11.0	6.5	6.5	6.5	4.5	4.0	4.5
15	12.5	12.0	12.5	11.0	10.5	10.5	6.5	6.5	6.5	5.0	4.5	5.0
16	12.5	12.0	12.5	11.0	10.5	10.5	6.5	6.5	6.5	5.0	4.5	5.0
17	12.5	12.0	12.5	10.5	10.5	10.5	6.5	6.0	6.0	5.0	4.5	5.0
18	13.0	12.5	12.5	10.5	10.5	10.5	6.0	5.5	6.0	5.5	5.0	5.0
19	13.0	12.5	13.0	11.0	10.5	10.5	6.0	5.0	5.5	5.5	5.0	5.0
20	13.5	13.0	13.0	11.0	10.5	10.5	5.5	5.0	5.0	5.0	5.0	5.0
21	13.5	13.0	13.5	11.0	10.5	10.5	5.0	5.0	5.0	5.0	5.0	5.0
22	14.5	13.5	14.0	11.0	10.5	10.5	5.0	4.5	5.0	5.5	5.0	5.0
23	15.0	14.0	14.5	11.0	10.5	10.5	5.0	4.5	5.0	5.5	5.0	5.5
24	15.0	14.5	14.5	11.0	10.5	11.0	5.0	4.5	5.0	5.5	5.0	5.0
25	15.0	14.5	14.5	11.5	11.0	11.0	5.5	5.0	5.5	5.0	5.0	5.0
26	14.5	14.0	14.5	12.0	11.0	11.5	5.5	5.0	5.0	5.0	4.5	5.0
27	14.5	14.0	14.0	12.0	11.5	12.0	5.0	4.5	5.0	5.0	4.5	4.5
28	14.0	13.5	14.0	12.5	11.5	12.0	5.0	4.5	5.0	5.0	4.5	4.5
29	14.5	14.0	14.0	13.0	12.5	13.0	6.0	5.0	5.5	4.5	4.5	4.5
30	14.5	14.0	14.0	12.5	11.0	12.0	6.0	5.0	5.5	4.5	4.0	4.0
31	14.5	14.0	14.0	---	---	---	6.0	5.5	5.5	4.0	3.5	4.0
MONTH	20.0	12.0	15.0	14.5	10.5	12.0	11.5	4.5	6.5	6.0	3.5	5.0

01467200 DELAWARE RIVER AT BENJAMIN FRANKLIN BRIDGE, AT PHILADELPHIA, PA--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	4.0	3.0	3.5	4.0	3.5	4.0	8.0	7.5	8.0	14.0	13.0	14.0
2	3.5	2.5	3.0	4.0	3.0	3.5	8.0	7.5	8.0	13.5	13.0	13.5
3	3.0	2.5	3.0	3.5	3.0	3.5	8.5	7.5	8.0	13.5	13.0	13.5
4	3.0	2.5	2.5	4.0	3.0	3.5	9.0	8.0	8.5	14.0	13.5	13.5
5	3.0	2.0	2.5	4.0	3.5	4.0	9.0	8.5	9.0	15.0	14.0	14.5
6	2.5	2.0	2.5	4.5	4.0	4.0	9.5	9.0	9.5	16.0	15.0	15.5
7	2.5	2.0	2.5	5.0	4.0	4.5	10.0	9.5	10.0	17.0	15.5	16.5
8	2.5	2.0	2.5	5.5	4.5	5.0	10.5	10.0	10.5	17.5	16.5	16.5
9	2.5	2.0	2.5	5.5	5.0	5.5	11.0	10.5	11.0	17.5	16.5	17.0
10	2.5	2.0	2.5	6.0	5.0	5.5	12.0	11.5	11.5	17.5	17.0	17.0
11	2.5	2.0	2.5	6.0	5.5	6.0	13.0	12.0	12.5	17.5	17.0	17.5
12	2.5	2.0	2.5	6.0	5.5	---	13.0	12.5	13.0	18.0	17.0	17.5
13	2.5	2.0	2.5	---	---	---	13.0	12.5	13.0	18.5	17.5	18.0
14	3.0	2.0	2.5	---	---	---	13.0	12.5	12.5	18.5	18.0	18.5
15	3.0	2.5	2.5	---	---	---	13.0	12.5	12.5	18.5	18.0	18.5
16	3.0	2.5	3.0	---	---	---	12.5	12.0	12.5	18.5	18.0	18.5
17	3.0	2.5	2.5	---	---	---	12.0	11.5	12.0	18.5	18.0	18.5
18	2.5	2.5	2.5	---	---	---	12.0	11.5	12.0	18.5	18.0	18.5
19	3.0	2.5	2.5	---	---	---	12.0	11.5	11.5	19.0	18.0	18.5
20	3.0	2.5	3.0	---	---	---	12.0	11.5	12.0	19.0	18.5	19.0
21	3.5	3.0	3.0	8.5	8.0	---	12.5	11.5	12.0	19.0	18.5	19.0
22	3.5	3.0	3.5	8.5	7.0	7.5	12.5	12.0	12.5	19.5	18.5	19.0
23	4.0	3.5	3.5	7.0	6.0	6.5	13.0	12.5	13.0	20.0	19.0	19.5
24	4.0	3.5	4.0	5.5	4.5	5.0	14.0	13.0	13.5	20.0	20.0	20.0
25	4.0	4.0	4.0	5.0	4.5	5.0	14.5	13.5	14.0	20.5	20.0	20.5
26	4.5	4.0	4.0	6.0	5.0	5.5	14.5	14.0	14.5	20.5	20.0	20.0
27	4.5	4.0	4.0	6.5	5.5	6.0	14.5	14.0	14.5	20.5	20.0	20.0
28	4.5	4.0	4.0	6.5	6.0	6.5	14.5	14.0	14.5	20.5	20.0	20.0
29	4.5	4.0	4.0	7.0	6.5	6.5	14.5	14.0	14.5	20.5	20.0	20.5
30	---	---	---	7.5	6.5	7.0	14.5	14.0	14.5	21.0	20.5	20.5
31	---	---	---	8.0	7.0	7.5	---	---	---	21.0	20.5	20.5
MONTH	4.5	2.0	3.0	8.5	3.0	5.5	14.5	7.5	12.0	21.0	13.0	18.0

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	21.5	20.5	21.0	25.0	24.5	24.5	28.0	27.5	28.0	27.0	26.5	26.5
2	22.0	21.0	21.5	25.0	24.5	25.0	28.0	27.5	28.0	27.5	26.5	27.0
3	22.5	22.0	22.0	25.0	25.0	25.0	28.0	28.0	28.0	27.0	27.0	27.0
4	22.5	22.0	22.5	25.5	25.0	25.0	28.5	28.0	28.0	27.5	27.0	27.0
5	22.5	22.0	22.0	25.5	25.0	25.5	29.0	28.0	28.5	27.0	27.0	27.0
6	22.5	22.0	22.0	25.5	25.0	25.5	28.5	28.0	28.5	27.0	27.0	27.0
7	23.0	22.0	22.5	25.5	25.0	25.0	28.5	28.0	28.5	27.0	26.5	27.0
8	23.0	22.0	22.5	25.5	25.0	25.0	29.0	28.5	28.5	26.5	26.5	26.5
9	22.5	22.0	22.0	25.5	25.0	25.0	29.0	28.5	29.0	26.5	26.0	26.5
10	22.0	21.5	22.0	26.0	25.0	25.5	29.0	28.5	28.5	26.5	26.0	26.0
11	22.0	21.5	21.5	26.0	25.5	26.0	29.0	28.5	28.5	26.0	25.5	26.0
12	22.0	21.5	21.5	26.0	25.5	26.0	29.0	28.5	28.5	26.0	25.5	25.5
13	22.0	21.5	22.0	26.0	25.5	25.5	28.5	28.0	28.5	26.0	25.5	25.5
14	22.5	21.5	22.0	26.0	25.5	26.0	28.5	28.0	28.5	25.5	25.5	25.5
15	22.5	22.0	22.5	26.5	26.0	26.0	28.0	28.0	---	25.5	25.0	25.5
16	22.5	22.0	22.5	26.5	26.0	26.5	---	---	---	25.0	24.5	25.0
17	22.5	22.0	22.5	27.0	26.5	26.5	---	---	---	24.5	24.5	24.5
18	22.5	22.0	22.0	27.0	26.5	27.0	---	---	---	24.5	24.0	24.5
19	---	---	---	27.0	27.0	27.0	26.5	26.5	26.5	24.5	24.0	24.5
20	---	---	---	27.5	27.0	27.5	26.5	26.0	26.5	24.5	24.0	24.0
21	---	---	---	28.0	27.5	27.5	26.5	26.0	26.0	24.5	24.0	24.0
22	---	---	---	28.0	27.5	28.0	26.0	25.5	25.5	24.5	24.0	24.5
23	---	---	---	28.0	27.5	27.5	26.0	25.5	25.5	25.0	24.5	24.5
24	---	---	---	27.5	27.5	27.5	26.0	25.5	25.5	24.5	24.0	24.0
25	24.0	23.5	23.5	28.0	27.0	27.5	26.0	25.5	26.0	24.0	23.5	24.0
26	24.0	23.5	23.5	28.0	27.5	27.5	26.5	26.0	26.0	23.5	23.0	23.5
27	24.5	23.5	24.0	28.0	27.5	27.5	26.5	26.0	26.5	23.0	22.5	23.0
28	24.5	24.0	24.0	28.0	27.5	27.5	26.5	26.5	26.5	22.5	22.5	22.5
29	24.5	24.0	24.5	27.5	27.0	27.5	26.5	26.5	26.5	22.5	22.0	22.0
30	24.5	24.5	24.5	28.0	27.5	27.5	27.0	26.5	26.5	22.0	22.0	22.0
31	---	---	---	28.0	27.5	27.5	27.0	26.5	26.5	---	---	---
MONTH	24.5	20.5	22.5	28.0	24.5	26.5	29.0	25.5	27.5	27.5	22.0	25.0
YEAR	29.0	2.0	15.0									

01467200 DELAWARE RIVER AT BENJAMIN FRANKLIN BRIDGE, AT PHILADELPHIA, PA--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	99	79	90	200	182	192	137	108	124	227	209	220
2	94	68	82	201	186	195	144	125	136	222	205	215
3	---	---	---	202	174	192	177	145	158	219	201	212
4	---	---	---	192	167	181	213	176	192	216	199	209
5	---	---	---	181	163	172	215	196	205	216	198	208
6	---	---	---	176	165	171	206	197	201	215	202	210
7	---	---	---	173	164	169	205	198	203	216	201	209
8	---	---	---	170	156	165	211	198	203	217	203	209
9	---	---	---	168	148	160	211	203	206	216	203	210
10	---	---	---	161	137	153	218	204	210	226	206	215
11	122	113	118	153	129	142	219	212	216	231	211	222
12	125	115	120	145	126	136	224	216	220	233	209	223
13	136	118	123	140	127	134	231	222	226	218	205	213
14	134	121	125	142	128	136	233	225	228	226	210	218
15	130	122	126	149	137	143	237	224	231	236	218	227
16	135	124	129	155	144	150	235	227	231	239	228	234
17	140	130	134	158	149	153	233	213	223	246	229	237
18	143	135	139	159	151	155	222	213	218	247	232	241
19	156	138	144	209	155	178	223	215	219	251	230	242
20	156	146	150	204	187	195	233	215	223	247	229	239
21	157	147	153	208	195	202	230	218	226	248	225	236
22	161	149	156	226	197	209	232	217	226	244	223	236
23	169	155	162	237	204	216	231	219	226	246	229	240
24	169	159	165	238	201	216	230	216	224	243	229	238
25	173	164	168	244	219	231	231	217	225	245	225	237
26	176	165	170	256	228	242	226	216	222	245	233	240
27	178	165	172	266	234	250	238	216	224	248	232	240
28	179	167	173	---	---	---	231	221	225	252	235	244
29	181	167	174	194	161	179	232	224	228	253	238	247
30	189	172	180	171	111	139	229	220	226	251	236	244
31	196	179	187	---	---	---	227	217	223	260	237	249
MONTH	196	68	145	266	111	178	238	108	211	260	198	228

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	259	243	253	334	304	323	157	138	149	188	174	180
2	260	244	256	342	306	325	150	133	142	182	157	173
3	265	250	259	345	315	332	144	132	137	180	139	160
4	271	249	263	359	317	341	151	135	143	155	134	143
5	280	256	268	353	319	339	146	137	140	146	130	138
6	283	259	273	349	310	333	147	138	142	145	132	140
7	284	263	277	347	310	333	146	137	141	150	134	143
8	290	268	282	349	316	337	147	140	144	152	142	149
9	292	273	286	350	320	335	160	140	148	163	145	152
10	293	277	287	356	314	338	156	141	146	161	149	156
11	299	276	291	350	305	329	151	141	147	163	155	160
12	297	273	289	324	310	---	153	138	146	170	159	164
13	301	280	293	---	---	---	149	121	134	175	168	172
14	305	292	299	---	---	---	130	117	125	178	168	174
15	318	292	305	---	---	---	132	122	127	184	172	178
16	324	295	313	---	---	---	136	124	129	191	179	184
17	321	302	312	---	---	---	142	128	135	197	185	190
18	327	301	315	---	---	---	144	135	139	198	191	195
19	332	301	318	---	---	---	147	134	140	209	193	198
20	334	307	322	---	---	---	142	131	136	212	199	205
21	338	314	328	247	228	---	142	131	136	214	202	209
22	342	312	331	224	149	180	143	135	140	213	200	207
23	347	319	334	153	116	134	150	140	145	215	200	208
24	342	317	331	124	95	107	152	141	147	228	207	217
25	341	305	326	112	96	102	155	147	152	224	211	219
26	339	302	324	121	98	110	164	151	158	225	211	219
27	352	302	331	125	112	119	169	157	162	225	212	219
28	345	306	329	138	118	124	173	163	168	231	216	223
29	342	305	328	139	123	132	179	168	172	240	220	230
30	---	---	---	136	127	131	191	170	176	240	225	234
31	---	---	---	149	128	136	---	---	---	245	230	239
MONTH	352	243	301	359	95	235	191	117	145	245	130	186

01467200 DELAWARE RIVER AT BENJAMIN FRANKLIN BRIDGE, AT PHILADELPHIA, PA--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	248	233	242	329	298	314	330	288	311	375	317	345
2	256	236	248	332	297	315	336	292	315	378	307	343
3	258	242	252	331	298	317	336	291	315	378	315	342
4	262	246	254	339	300	320	338	292	315	393	315	349
5	263	244	255	335	299	318	333	297	316	396	335	361
6	266	242	257	329	291	314	332	270	294	401	332	365
7	267	249	260	335	294	314	312	269	288	404	323	363
8	280	252	266	332	295	313	313	269	289	401	335	372
9	280	252	267	324	295	312	311	275	290	415	331	376
10	281	264	272	330	297	315	314	269	293	425	338	378
11	281	267	275	329	302	318	320	274	299	427	345	385
12	285	270	278	337	299	322	317	279	298	428	346	384
13	288	269	280	337	297	320	320	280	300	431	355	393
14	294	272	285	341	299	322	324	287	306	437	352	398
15	294	272	286	337	301	323	325	289	---	432	351	392
16	294	278	288	338	302	322	---	---	---	469	349	405
17	298	276	290	332	300	319	---	---	---	462	368	416
18	302	280	293	332	300	318	---	---	---	425	321	370
19	---	---	---	339	304	322	333	300	317	412	312	360
20	---	---	---	334	297	319	342	293	319	420	320	369
21	---	---	---	333	296	316	364	303	328	437	329	375
22	---	---	---	342	297	316	365	308	337	417	333	370
23	---	---	---	341	294	320	363	310	338	427	330	382
24	---	---	---	342	296	320	361	294	334	445	325	395
25	317	293	305	340	296	320	362	298	332	480	342	420
26	324	294	309	342	293	320	363	302	336	483	356	417
27	325	297	312	345	290	319	365	315	342	441	341	392
28	328	293	313	346	293	322	369	308	343	452	346	401
29	332	295	315	345	280	316	376	311	346	477	343	410
30	330	295	313	334	280	308	377	315	351	496	366	421
31	---	---	---	330	289	310	376	318	349	---	---	---
MONTH	332	233	280	346	280	318	377	269	319	496	307	382
YEAR	496	68	245									

OXYGEN, DISSOLVED (DO), MG/L, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	3.5	2.0	2.7	5.3	3.7	4.3	9.3	7.9	8.4	10.6	9.7	10.1
2	4.5	2.1	3.3	5.2	3.5	4.1	9.4	8.1	8.7	10.5	9.6	10.0
3	4.6	2.6	3.7	5.8	3.5	4.3	9.7	8.6	9.1	10.6	9.4	9.9
4	4.9	3.2	4.0	6.8	3.8	5.1	9.9	8.5	9.1	10.6	9.3	9.9
5	4.9	3.3	3.9	7.5	4.9	6.2	10.2	8.9	9.5	10.8	9.3	9.8
6	5.6	3.6	4.6	7.5	5.9	6.8	10.3	8.9	9.5	10.6	9.2	9.7
7	5.9	4.8	5.3	7.6	6.5	7.0	10.2	8.8	9.4	10.6	9.2	9.8
8	6.3	5.5	5.8	7.8	6.4	7.0	10.4	8.9	9.9	11.0	9.7	10.3
9	6.4	5.4	5.8	7.8	6.1	6.9	11.0	9.7	10.3	11.0	9.4	10.0
10	6.3	5.2	5.7	7.9	6.0	6.7	11.0	9.8	10.3	10.6	9.1	9.8
11	6.4	5.4	5.9	8.2	6.4	7.1	10.9	9.4	10.1	10.5	8.9	9.5
12	---	---	---	8.1	6.6	7.3	10.4	9.0	9.6	11.0	9.2	9.9
13	---	---	---	8.1	6.7	7.3	10.4	8.6	9.4	11.5	10.1	10.8
14	---	---	---	8.6	6.7	7.9	9.4	8.3	8.8	11.4	9.9	10.6
15	8.6	7.5	7.9	8.6	7.3	8.0	9.4	8.1	8.7	10.9	9.7	10.3
16	8.5	7.0	7.8	8.3	7.2	7.8	9.6	8.1	8.8	10.7	9.4	9.9
17	8.1	6.6	7.2	8.1	7.2	7.6	10.7	8.2	9.5	10.4	9.1	9.6
18	7.7	6.2	6.9	8.1	7.0	7.5	10.0	9.0	9.5	9.9	8.6	9.2
19	7.6	5.9	6.7	8.0	6.8	7.2	10.1	8.9	9.3	9.7	8.5	9.0
20	7.1	5.3	6.2	7.8	6.5	7.0	9.8	8.8	9.2	9.7	8.5	9.1
21	7.2	5.5	6.3	7.7	6.0	6.7	10.1	8.5	9.1	9.6	8.5	9.0
22	6.9	5.4	6.1	7.2	5.4	6.2	10.0	8.3	8.9	9.9	8.4	9.0
23	6.5	5.0	5.6	7.4	5.5	6.3	9.8	8.3	8.9	9.5	8.2	8.7
24	6.1	4.8	5.3	7.6	5.7	6.4	10.2	8.3	9.1	9.5	8.4	8.8
25	6.2	4.8	5.4	7.5	5.8	6.5	10.1	8.5	9.2	9.6	8.0	8.7
26	6.1	4.7	5.3	7.6	5.9	6.5	10.6	8.9	9.7	9.0	7.7	8.4
27	6.1	4.5	5.2	8.3	6.4	7.1	11.4	9.6	10.6	9.0	7.6	8.2
28	6.4	4.5	5.1	9.2	7.4	8.4	11.5	10.7	11.1	9.1	7.6	8.2
29	5.9	4.5	5.1	8.8	8.0	8.3	11.2	10.6	10.9	9.1	7.7	8.3
30	5.7	4.3	4.9	8.8	7.9	8.3	10.9	10.3	10.6	9.4	7.9	8.5
31	5.3	4.0	4.6	---	---	---	10.7	10.0	10.3	9.3	7.8	8.3
MONTH	8.6	2.0	5.4	9.2	3.5	6.8	11.5	7.9	9.5	11.5	7.6	9.4

01467200 DELAWARE RIVER AT BENJAMIN FRANKLIN BRIDGE, AT PHILADELPHIA, PA--Continued

OXYGEN, DISSOLVED (DO), MG/L, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	9.4	7.8	8.4	9.0	7.0	7.8	11.0	10.6	10.8	8.3	6.3	7.2
2	9.7	8.1	8.5	8.9	7.1	7.8	11.0	10.6	10.7	8.4	7.0	7.7
3	9.6	8.2	8.7	8.9	7.4	7.9	11.4	10.4	10.8	8.6	7.0	7.7
4	9.8	8.3	8.7	8.6	7.3	7.6	11.0	10.3	10.5	8.6	7.3	8.0
5	10.0	8.3	8.8	8.5	6.8	7.5	10.9	10.3	10.6	8.8	7.5	7.9
6	9.7	8.4	8.8	8.7	6.9	7.5	10.9	10.3	10.5	8.2	6.8	7.3
7	9.6	8.3	8.7	8.6	6.6	7.3	10.5	10.0	10.2	7.8	6.2	6.8
8	9.6	8.1	8.5	8.4	6.3	7.0	10.4	9.5	9.9	7.1	5.3	6.1
9	9.4	7.7	8.3	7.8	6.2	6.9	10.2	9.0	9.4	6.7	4.9	5.6
10	9.3	7.5	8.2	8.2	6.1	6.8	9.1	8.0	8.5	6.8	4.7	5.5
11	9.4	7.5	8.1	8.3	5.9	7.0	8.7	7.9	8.3	6.6	4.8	5.5
12	9.9	7.5	8.3	8.8	7.1	---	9.2	7.9	8.5	6.4	4.3	5.1
13	9.5	7.5	8.3	---	---	---	9.5	8.3	8.8	5.4	3.8	4.4
14	9.4	7.5	8.2	---	---	---	9.7	8.6	9.0	6.2	3.6	4.6
15	9.4	7.4	8.1	---	---	---	8.9	8.1	8.4	6.0	4.0	4.9
16	8.8	7.2	7.7	---	---	---	9.1	8.3	8.7	5.8	4.1	4.8
17	8.7	7.2	7.8	---	---	---	9.3	8.5	8.8	5.6	3.8	4.5
18	9.3	7.4	8.0	---	---	---	9.2	8.3	8.6	5.5	3.8	4.4
19	9.3	7.5	8.2	---	---	---	9.5	8.4	8.9	5.1	3.5	4.0
20	9.4	7.4	8.1	---	---	---	9.9	8.5	9.2	4.4	2.8	3.4
21	8.7	7.0	7.6	10.1	9.3	---	10.0	8.8	9.3	3.7	2.1	2.8
22	8.7	6.6	7.3	11.3	9.4	10.5	9.4	8.5	8.9	3.6	1.7	2.5
23	8.2	6.3	7.0	11.6	10.8	11.1	9.2	7.8	8.5	4.0	1.7	2.6
24	8.1	6.2	7.0	12.3	11.5	11.8	9.1	7.3	8.2	3.9	1.4	2.3
25	8.6	6.1	7.2	12.3	11.9	12.0	8.6	6.8	7.7	3.9	1.3	2.3
26	8.6	6.2	7.2	12.1	11.7	11.9	8.1	6.4	7.3	4.8	1.9	3.1
27	8.6	6.3	7.1	11.9	11.4	11.6	7.8	6.4	7.0	5.4	2.8	3.8
28	8.8	6.5	7.4	11.7	11.1	11.4	7.6	6.2	6.8	5.6	3.0	3.9
29	8.9	6.6	7.5	11.6	10.8	11.2	7.2	5.8	6.3	6.0	3.0	4.1
30	---	---	---	11.6	11.0	11.2	7.8	5.6	6.7	5.4	3.1	4.0
31	---	---	---	11.4	10.7	11.1	---	---	---	4.8	2.6	3.3
MONTH	10.0	6.1	8.0	12.3	5.9	9.3	11.4	5.6	8.9	8.8	1.3	4.8

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	5.3	2.3	3.2	.8	.4	.6	.8	.0	.3	1.8	.5	1.1
2	4.7	2.7	3.4	1.0	.4	.7	.9	.0	.5	2.4	.8	1.4
3	4.3	2.2	2.9	.9	.4	.5	1.4	.3	.8	1.8	.7	1.2
4	3.4	1.8	2.3	1.0	.4	.5	1.6	.4	1.0	1.6	.5	1.0
5	3.2	1.6	2.2	1.2	.4	.8	2.2	.3	1.1	1.4	.4	.8
6	3.0	1.1	1.8	1.6	.4	.9	1.7	.5	.9	1.2	.3	.7
7	2.4	.7	1.3	1.5	.8	1.1	2.0	.4	1.0	1.5	.4	.9
8	2.1	.6	1.2	1.5	.6	1.1	1.9	.4	1.0	1.7	.5	1.0
9	3.5	1.3	2.0	1.3	.5	.9	1.6	.4	1.0	1.7	.4	1.0
10	2.4	1.3	1.8	.9	.4	.6	2.3	.5	1.3	1.6	.6	1.0
11	2.2	1.0	1.5	.7	.4	.5	2.1	.6	1.1	2.3	.5	1.1
12	2.2	.8	1.3	.8	.4	.5	1.3	.4	.8	2.1	.9	1.2
13	2.8	.6	1.4	1.3	.3	.7	1.3	.4	.7	1.4	.7	1.0
14	2.7	.7	1.3	1.5	.5	.8	1.5	.3	.7	1.4	.7	1.0
15	3.1	.8	1.6	1.4	.6	1.0	.6	.3	---	1.2	.7	.9
16	2.7	1.1	1.6	1.7	.4	1.0	---	---	---	1.2	.6	.9
17	3.0	.7	1.5	.9	.3	.5	---	---	---	1.1	.5	.8
18	2.6	.8	1.4	.7	.3	.4	---	---	---	1.2	.5	.7
19	---	---	---	.7	.3	.4	.6	.4	.5	.9	.5	.6
20	---	---	---	1.0	.3	.6	.8	.3	.5	1.3	.5	.7
21	---	---	---	1.2	.3	.6	.7	.3	.5	1.2	.5	.7
22	---	---	---	1.0	.3	.6	.7	.3	.4	1.0	.5	.7
23	---	---	---	.6	.3	.4	.8	.3	.5	1.1	.5	.7
24	---	---	---	.7	.3	.4	1.4	.3	.7	1.3	.5	.8
25	1.8	.6	1.2	.7	.3	.4	1.5	.4	.8	1.0	.4	.7
26	1.3	.4	.8	1.2	.3	.6	1.2	.3	.8	1.2	.4	.7
27	1.0	.4	.6	1.8	.3	.9	1.2	.4	.6	1.4	.5	.9
28	1.5	.4	.7	2.1	.7	1.3	1.1	.3	.5	1.7	.6	1.1
29	1.2	.4	.7	1.4	.4	.8	.8	.3	.5	2.1	.9	1.5
30	.9	.4	.6	.8	.3	.5	.9	.3	.5	1.6	.9	1.2
31	---	---	---	.8	.3	.5	1.1	.3	.7	---	---	---
MONTH	5.3	.4	1.6	2.1	.3	.7	2.3	.0	.7	2.4	.3	.9
YEAR	12.3	.0	5.5									

01467200 DELAWARE RIVER AT BENJAMIN FRANKLIN BRIDGE, AT PHILADELPHIA, PA--Continued

PH (STANDARD UNITS), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	6.6	6.2	6.4	6.5	5.9	6.2	6.6	6.4	6.5	6.6	6.4	6.5
2	6.6	6.4	6.5	6.7	6.2	6.4	6.4	6.4	6.4	6.6	6.4	6.5
3	6.6	6.4	6.5	6.6	6.3	6.4	6.4	6.3	6.4	6.5	6.4	6.5
4	6.6	6.4	6.5	6.5	6.2	6.4	6.4	6.3	6.4	6.5	6.3	6.4
5	6.6	6.4	6.5	6.3	6.0	6.1	6.5	6.3	6.4	6.5	6.3	6.4
6	6.8	6.4	6.6	6.8	6.0	6.3	6.5	6.3	6.4	6.5	6.3	6.4
7	7.0	6.6	6.8	6.7	6.5	6.6	6.5	6.3	6.4	6.5	6.3	6.4
8	7.0	6.5	6.8	6.6	6.5	6.6	6.7	6.4	6.5	6.6	6.4	6.5
9	7.0	6.7	6.8	6.6	6.5	6.6	6.7	6.4	6.6	6.5	6.3	6.4
10	7.0	6.6	6.8	6.6	6.5	6.6	6.6	6.4	6.5	6.6	6.3	6.4
11	7.6	6.7	7.1	6.6	6.6	6.6	6.6	6.4	6.5	6.6	6.2	6.4
12	8.5	7.3	7.7	6.6	6.5	6.6	6.6	6.4	6.5	6.6	6.4	6.5
13	8.1	7.3	7.6	6.6	6.5	6.6	6.6	6.3	6.5	6.7	6.4	6.6
14	8.7	7.5	8.1	6.7	6.5	6.6	6.5	6.4	6.5	6.6	6.4	6.5
15	8.1	7.4	7.7	6.7	6.5	6.6	6.6	6.3	6.4	6.6	6.3	6.5
16	8.1	7.1	7.5	6.7	6.5	6.6	6.6	6.3	6.5	6.5	6.3	6.4
17	7.5	6.9	7.2	6.7	6.5	6.6	6.7	6.4	6.5	6.6	6.2	6.4
18	7.3	6.8	6.9	6.7	6.5	6.6	6.6	6.4	6.5	6.5	6.2	6.4
19	6.8	6.5	6.7	6.7	6.5	6.5	6.6	6.2	6.4	6.5	6.3	6.4
20	7.0	6.6	6.7	6.7	6.4	6.5	6.6	6.3	6.4	6.5	6.3	6.4
21	6.7	6.4	6.5	6.6	6.4	6.5	6.6	6.3	6.4	6.5	6.3	6.4
22	6.6	6.3	6.5	6.6	6.3	6.5	6.6	6.3	6.4	6.5	6.3	6.4
23	6.4	6.0	6.2	6.6	6.3	6.5	6.5	6.3	6.4	6.5	6.2	6.4
24	6.4	5.8	6.1	6.6	6.4	6.5	6.6	6.3	6.4	6.5	6.3	6.4
25	6.6	6.1	6.3	6.6	6.3	6.5	6.5	6.3	6.4	6.5	6.3	6.4
26	6.3	6.0	6.1	6.6	6.3	6.4	6.6	6.4	6.5	6.5	6.3	6.4
27	6.3	5.7	6.0	6.7	6.4	6.6	6.7	6.4	6.6	6.5	6.3	6.4
28	6.4	5.6	6.0	6.8	6.6	6.7	6.7	6.6	6.6	6.5	6.2	6.4
29	6.1	5.6	5.9	6.8	6.7	6.8	6.7	6.6	6.7	6.5	6.2	6.4
30	6.5	5.7	6.1	6.7	6.6	6.6	6.7	6.5	6.6	6.5	6.3	6.4
31	6.6	6.0	6.4	---	---	---	6.7	6.5	6.6	6.5	6.2	6.3
MONTH	8.7	5.6	6.7	6.8	5.9	6.5	6.7	6.2	6.5	6.7	6.2	6.4

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	6.5	6.2	6.3	6.6	6.4	6.5	6.6	6.5	6.6	6.6	6.4	6.5
2	6.5	6.2	6.4	6.6	6.3	6.4	6.6	6.5	6.5	6.5	6.4	6.5
3	6.5	6.2	6.3	6.6	6.3	6.4	6.5	6.1	6.4	6.5	6.3	6.4
4	6.5	6.2	6.3	6.5	6.2	6.4	6.4	6.3	6.3	6.4	6.2	6.3
5	6.6	6.2	6.4	6.5	6.3	6.4	6.5	6.2	6.4	6.4	6.3	6.3
6	6.6	6.2	6.4	6.5	6.3	6.4	6.5	6.4	6.4	6.4	6.3	6.3
7	6.6	6.3	6.4	6.5	6.3	6.4	6.5	6.4	6.4	6.4	6.3	6.3
8	6.6	6.3	6.4	6.5	6.3	6.4	6.5	6.4	6.4	6.4	6.2	6.3
9	6.5	6.2	6.4	6.5	6.3	6.4	6.5	6.3	6.4	6.4	6.2	6.3
10	6.5	6.3	6.4	6.5	6.3	6.4	6.4	6.3	6.4	6.5	6.0	6.3
11	6.6	6.2	6.4	6.6	6.3	6.4	6.5	6.4	6.4	6.5	6.2	6.3
12	6.6	6.3	6.4	6.6	6.5	---	6.5	6.3	6.4	6.5	6.2	6.3
13	6.6	6.3	6.4	---	---	---	6.5	6.4	6.4	6.4	6.2	6.3
14	6.6	6.3	6.4	---	---	---	6.5	6.3	6.4	6.4	6.1	6.2
15	6.6	6.2	6.4	---	---	---	6.4	6.3	6.4	6.4	6.1	6.3
16	6.5	6.2	6.3	---	---	---	6.5	6.3	6.4	6.4	6.2	6.3
17	6.5	6.3	6.4	---	---	---	6.5	6.4	6.4	6.4	6.1	6.3
18	6.6	6.2	6.4	---	---	---	6.4	6.3	6.4	6.4	6.1	6.3
19	6.6	6.3	6.4	---	---	---	6.4	6.3	6.3	6.3	6.2	6.3
20	6.6	6.2	6.4	---	---	---	6.4	6.2	6.3	6.3	6.2	6.2
21	6.5	6.2	6.3	6.5	6.4	---	6.4	6.3	6.4	6.3	6.1	6.2
22	6.5	6.1	6.3	6.5	6.2	6.4	6.4	6.3	6.3	6.2	6.1	6.2
23	6.5	6.2	6.3	6.2	5.8	6.0	6.4	6.3	6.4	6.2	6.1	6.2
24	6.5	6.2	6.4	5.8	5.5	5.7	6.5	6.3	6.4	6.3	6.0	6.1
25	6.6	6.2	6.4	5.8	5.7	5.7	6.5	6.2	6.4	6.2	6.0	6.1
26	6.6	6.2	6.4	6.0	5.7	5.9	6.5	6.2	6.4	6.3	6.0	6.1
27	6.5	6.2	6.4	6.2	6.0	6.1	6.5	6.3	6.4	6.3	6.1	6.2
28	6.6	6.3	6.4	6.3	6.1	6.2	6.5	6.3	6.4	6.3	6.0	6.1
29	6.6	6.3	6.4	6.4	6.1	6.3	6.5	6.3	6.4	6.3	6.0	6.2
30	---	---	---	6.4	6.3	6.3	6.6	6.3	6.4	6.3	6.0	6.1
31	---	---	---	6.6	6.3	6.4	---	---	---	6.2	6.0	6.1
MONTH	6.6	6.1	6.4	6.6	5.5	6.3	6.6	6.1	6.4	6.6	6.0	6.3

01467200 DELAWARE RIVER AT BENJAMIN FRANKLIN BRIDGE, AT PHILADELPHIA, PA--Continued

PH (STANDARD UNITS), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	6.3	6.0	6.1	6.4	6.3	6.3	6.4	6.3	6.4	6.6	6.4	6.5
2	6.2	6.0	6.1	6.4	6.2	6.3	6.4	6.3	6.4	6.6	6.4	6.5
3	6.2	6.0	6.1	6.4	6.3	6.4	6.4	6.3	6.4	6.6	6.4	6.5
4	6.4	6.0	6.2	6.4	6.3	6.4	6.5	6.3	6.4	6.6	6.4	6.5
5	6.4	6.2	6.3	6.4	6.3	6.4	6.5	6.3	6.4	6.6	6.4	6.5
6	6.4	6.2	6.3	6.4	6.3	6.4	6.4	6.3	6.4	6.6	6.4	6.5
7	6.4	6.2	6.3	6.4	6.3	6.4	6.4	6.3	6.4	6.6	6.4	6.5
8	6.4	6.2	6.3	6.4	6.3	6.4	6.4	6.3	6.3	6.6	6.4	6.5
9	6.5	6.3	6.3	6.4	6.3	6.4	6.4	6.3	6.3	6.6	6.4	6.5
10	6.4	6.2	6.3	6.4	6.3	6.4	6.4	6.2	6.3	6.5	6.4	6.5
11	6.5	6.2	6.3	6.4	6.3	6.4	6.4	6.2	6.3	6.6	6.3	6.5
12	6.4	6.2	6.3	6.4	6.3	6.4	6.4	6.2	6.3	6.6	6.4	6.5
13	6.5	6.2	6.3	6.5	6.4	6.4	6.4	6.2	6.3	6.6	6.4	6.5
14	6.4	6.2	6.3	6.5	6.4	6.4	6.4	6.2	6.3	6.6	6.4	6.5
15	6.5	6.2	6.3	6.5	6.4	6.4	6.4	6.2	---	6.6	6.4	6.5
16	6.4	6.2	6.3	6.5	6.4	6.4	---	---	---	6.5	6.1	6.3
17	6.5	6.2	6.3	6.5	6.4	6.4	---	---	---	6.3	6.0	6.1
18	6.4	6.2	6.3	6.5	6.4	6.4	---	---	---	6.3	6.1	6.2
19	---	---	---	6.5	6.4	6.5	6.4	6.1	6.3	6.3	6.1	6.2
20	---	---	---	6.5	6.4	6.5	6.6	6.4	6.5	6.3	6.1	6.2
21	---	---	---	6.5	6.5	6.5	6.6	6.4	6.5	6.3	6.1	6.2
22	---	---	---	6.5	6.4	6.5	6.6	6.4	6.5	6.3	6.1	6.2
23	---	---	---	6.5	6.4	6.4	6.6	6.5	6.6	6.3	6.1	6.2
24	---	---	---	6.5	6.4	6.5	6.7	6.5	6.6	6.3	6.1	6.2
25	6.5	6.3	6.4	6.5	6.4	6.5	6.7	6.5	6.6	6.3	6.1	6.2
26	6.4	6.2	6.3	6.5	6.4	6.5	6.6	6.5	6.6	6.3	6.1	6.2
27	6.4	6.2	6.3	6.5	6.4	6.5	6.6	6.4	6.5	6.3	6.1	6.2
28	6.4	6.2	6.3	6.5	6.4	6.4	6.6	6.4	6.5	6.3	6.1	6.2
29	6.4	6.2	6.3	6.5	6.4	6.4	6.6	6.4	6.5	6.3	6.1	6.2
30	6.4	6.2	6.3	6.4	6.3	6.4	6.6	6.4	6.5	6.3	6.1	6.2
31	---	---	---	6.4	6.3	6.4	6.6	6.4	6.5	---	---	---
MONTH	6.5	6.0	6.3	6.5	6.2	6.4	6.7	6.1	6.4	6.6	6.0	6.4
YEAR	8.7	5.5	6.4									

01467329 SOUTH BRANCH BIG TIMBER CREEK AT BLACKWOOD TERRACE, NJ

LOCATION.--Lat 39°48'05", long 75°04'27", Gloucester County, Hydrologic Unit 02040202, at bridge on Blackwood-Clementon Road at Blackwood Terrace, 1,000 ft (305 m) upstream from Bull Run, and 2.0 mi (3.2 km) northeast of Fairview.

DRAINAGE AREA.--19.1 mi² (49.5 km²).

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1976 to current year.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIOCHEM UNINHIB 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)	HARD-NESS (MG/L AS CACO3)
OCT 18...	1130	124	137	6.7	15.0	9.5	1.8	--	--	39
JAN 30...	1100	35	126	7.2	2.0	7.4	1.0	<2	<2	39
APR 21...	0600	74	126	7.1	15.0	8.0	1.5	330	350	39
JUN 11...	1030	40	116	6.9	17.5	8.1	1.6	500	200	35
JUL 23...	1030	44	122	6.9	26.0	5.5	2.4	200	3300	36
AUG 26...	1330	22	127	7.2	25.5	8.0	1.3	200	50	37

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)
OCT 18...	11	2.7	7.2	2.8	34	0	28	--	14	11
JAN 30...	11	2.8	7.0	2.1	26	0	21	--	15	11
APR 21...	11	2.7	5.8	2.3	28	0	23	--	14	11
JUN 11...	9.4	2.7	7.7	2.0	17	0	14	.0	11	10
JUL 23...	9.7	2.8	6.2	2.6	34	0	28	--	9.0	9.6
AUG 26...	10	2.8	6.3	2.3	29	0	24	--	10	10

DATE	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, ORTHOPH OSPHATE TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT 18...	.1	6.9	83	1.6	.300	--	--	--	1.0	3.3
JAN 30...	.1	6.8	91	1.8	.220	.02	.24	2.0	.29	2.9
APR 21...	.1	5.2	79	1.5	.260	.12	.38	1.9	.30	4.6
JUN 11...	.1	6.2	71	1.1	.140	.37	.51	1.6	.49	5.6
JUL 23...	.1	3.5	72	.78	.210	.55	.76	1.5	.58	4.9
AUG 26...	.1	5.6	79	1.1	.120	.74	.86	2.0	.80	4.7

DATE	TIME	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC TOTAL IN BOT-TOM MA-TERIAL (UG/G AS AS)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE)	BORON, TOTAL RECOV-ERABLE (UG/L AS B)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	CHRO-MIUM, RECOV. FM BOT-TOM MA-TERIAL (UG/G)
OCT 18...	1130	--	--	0	--	--	--	<10	--	<10
JUN 11...	1030	20	1	--	0	50	0	--	<10	--

01467329 SOUTH BRANCH BIG TIMBER CREEK AT BLACKWOOD TERRACE, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, RECOV. FM BOT-TOM MA-TERIAL (UG/G)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MERCURY RECOV. FM BOT-TOM MA-TERIAL (UG/G AS HG)
OCT 18...	--	<10	--	7900	--	170	--	150	--	.00
JUN 11...	3	--	1800	--	5	--	30	--	.1	--

DATE	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, TOTAL IN BOT-TOM MA-TERIAL (UG/G)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS ZN)	PHENOLS (UG/L)	PCB, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	PCN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	ALDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	CHLOR-DANE, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)
OCT 18...	--	--	0	--	40	--	10	.0	.0	6
JUN 11...	0	0	--	10	--	1	--	--	--	--

DATE	DDD, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	DDE, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	DDT, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	DI-AZINON, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	DI-ELDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	ENDO-SULFAN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	ENDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	ETHION, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	HEPTA-CHLOR, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	HEPTA-CHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)
OCT 18...	.9	1.7	.3	.0	.0	.0	.0	.0	.0	.0
JUN 11...	--	--	--	--	--	--	--	--	--	--

DATE	LINDANE TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	MALA-THION, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	METH-OXY-CHLOR, TOT. IN BOTTOM MATL. (UG/KG)	METHYL PARA-THION, TOT. IN BOTTOM MATL. (UG/KG)	METHYL TRI-THION, TOT. IN BOTTOM MATL. (UG/KG)	MIREX, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	PARA-THION, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	PER-THANE IN BOTTOM MATERIL (UG/KG)	TOXA-PHENE, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	TRI-THION, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)
OCT 18...	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
JUN 11...	--	--	--	--	--	--	--	--	--	--

01467359 NORTH BRANCH BIG TIMBER CREEK AT GLENDORA, NJ

LOCATION.--Lat 39°50'04", long 75°04'02", Camden County, Hydrologic Unit 02040202, at bridge on State Route 168 in Glendora, 0.5 mi (0.8 km) downstream from Otter Brook, 1.0 mi (1.6 km) southeast of Clements Bridge, and 1.6 mi (2.6 km) north of Mechanicsville.

DRAINAGE AREA.--18.8 mi^2 (48.7 km^2).

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1976 to current year.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH FIELD (UNITS)	TEMPER- ATURE, WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN DEMAND, BIOCHEM UNINHIB 5 DAY (MG/L)	COLI- FORM, FECAL, EC BROTH (MPN)	STREP- TOCOCCI FECAL (MPN)	HARD- NESS (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)
OCT 18...	1400	212	6.5	16.0	7.0	3.3	--	--	53	16
JAN 31...	1000	207	7.0	1.0	10.7	2.8	5400	920	53	16
APR 23...	1000	204	7.3	16.0	5.8	2.6	1100	26	51	15
JUN 12...	0800	178	7.0	13.5	4.3	5.4	3500	3500	47	14
JUL 23...	1230	175	6.9	24.0	2.0	3.9	110	4800	43	13
AUG 20...	1240	170	7.1	24.0	4.2	2.9	270	1700	48	14

DATE	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE (MG/L AS HCO3)	CAR- BONATE (MG/L AS CO3)	ALKA- LINITY (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)
OCT 18...	3.1	14	4.9	59	0	48	23	14	.2
JAN 31...	3.2	16	4.4	52	0	43	25	14	.2
APR 23...	3.2	14	4.3	55	0	45	21	18	.2
JUN 12...	2.8	14	4.1	49	0	40	20	13	.2
JUL 23...	2.6	12	4.5	46	0	38	17	12	.2
AUG 20...	3.1	15	4.8	52	0	43	21	16	.3

DATE	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS N)	PHOS- PHORUS, ORTHOPH OSPHATE TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT 18...	9.1	129	2.0	1.500	--	--	--	2.1	6.3
JAN 31...	11	127	1.4	1.200	.40	1.6	3.0	3.9	7.4
APR 23...	7.7	131	1.7	1.300	.70	2.0	3.7	1.7	4.2
JUN 12...	9.1	115	1.4	.820	1.3	2.1	3.5	2.3	6.3
JUL 23...	7.6	96	.75	.460	1.0	1.5	2.2	1.6	6.1
AUG 20...	9.9	117	1.2	.410	1.2	1.6	2.8	1.5	2.0

01474500 SCHUYLKILL RIVER AT PHILADELPHIA, PA

LOCATION.--Lat 39°58'00", long 75°11'20", Philadelphia County, PA, Hydrologic Unit 02040203, on right bank 150 ft (46 m) upstream from Fairmount Dam, 1,500 ft (457 m) upstream from Spring Garden Street Bridge, in Philadelphia, and 8.7 mi (14.0 km) upstream from mouth. Water-quality sampling site 1.6 mi (2.6 km) upstream.

DRAINAGE AREA.--1,893 mi^2 (4,903 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--September 1931 to current year. Records for January 1898 to December 1912, published in WSP 35, 48, 65, 82, 97, 125, 166, 202, 241, 261, 281, 301, 381, have been found to be unreliable and should not be used.

REVISED RECORDS.--WSP 756: Drainage area. WSP 1302: 1936(M). WSP 1432: 1945. See also PERIOD OF RECORD.

GAGE.--Water-stage recorder and concrete contol. Datum of gage is 5.74 ft (1.750 m) National Geodetic Vertical Datum of 1929. Prior to Nov. 25, 1956, water-stage recorder at site on right bank just upstream from Fairmount Dam at same datum. Nov. 26, 1956 to Oct. 6, 1966, water-stage recorder at site on left bank 40 ft (12 m) upstream from Fairmount Dam at same datum.

REMARKS.--Water-discharge records good. Some regulation by reservoirs above station. Records of daily discharge do not include diversion above station by city of Philadelphia for municipal water supply.

AVERAGE DISCHARGE.--49 years, 2,962 ft^3/s (83.88 m^3/s), 21.25 in/yr (540 mm/yr), adjusted for diversion.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 103,000 ft^3/s (2,920 m^3/s) June 23, 1972, gage height, 14.65 ft (4.465 m); no flow over dam at times; minimum daily, 0.6 ft^3/s (0.02 m^3/s) Sept. 2, 1966.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Oct. 4, 1869, reached a stage of 17.0 ft (5.18 m), discharge, 135,000 ft^3/s (3,820 m^3/s), from rating extended above 46,000 ft^3/s (1,300 m^3/s). Flood of Mar. 1, 1902, reached a stage of 14.8 ft (4.511 m), discharge, 98,000 ft^3/s (2,780 m^3/s).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 18,000 m^3/s (510 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Nov. 25	2215	19600	555	8.70	2.652
Mar. 21	2400	*30200	856	9.76	2.975

Minimum discharge, 176 ft^3/s (4.98 m^3/s) Sept. 9, 25, gage height, 5.62 ft (1.713 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4720	1350	2860	2330	1050	598	13000	8580	1890	1140	598	339
2	12400	1380	2290	2150	1000	572	9000	6530	1980	883	522	317
3	8940	4950	2150	1980	950	625	7320	5500	1980	706	572	264
4	8870	5070	2030	1810	950	706	8720	4660	1980	678	493	272
5	7460	3160	1940	1620	883	678	7800	3910	1810	678	691	268
6	9820	2610	1850	1500	883	734	5430	3260	1530	1140	1030	266
7	7190	2380	2030	1420	852	678	4480	2760	1380	914	695	298
8	5810	2200	1980	1390	822	651	3740	3060	1460	763	456	288
9	5010	2020	1620	1320	822	1310	5680	2660	1690	678	365	235
10	11000	2290	1460	1210	792	1570	9820	2290	1690	625	345	250
11	8680	2850	1350	1460	763	1490	7320	2150	1810	598	400	220
12	4840	4360	1280	5920	763	1460	5680	2330	1650	547	740	228
13	4840	3010	1420	3320	706	1210	4950	7250	1490	547	551	242
14	3630	2560	2330	2240	678	2520	4480	6590	1380	522	466	250
15	2910	2330	2070	2110	651	2470	5940	4720	1460	450	446	305
16	2570	2020	1650	2110	822	2710	5810	3740	1650	651	456	349
17	2290	1940	1620	1900	822	3310	4890	3160	1530	852	427	391
18	1940	1770	1540	1730	651	10100	4300	3110	1420	1140	415	1080
19	1770	1690	1320	3010	651	9820	3740	3210	1280	678	422	1150
20	1620	1610	1320	2380	651	6790	3370	2950	1210	497	364	515
21	1540	1530	1250	1980	822	12200	3110	3160	1010	474	381	436
22	1460	1460	1280	1600	914	21700	2760	4020	1010	450	367	346
23	1420	1420	1320	1500	1650	13300	2560	3110	1010	651	389	300
24	2520	1380	1540	1400	1530	8650	2380	2520	852	734	379	286
25	2910	1350	3910	1300	1420	10600	2330	2330	792	792	360	350
26	1810	6100	6800	1250	1170	7940	2020	2110	734	734	329	630
27	1690	9920	5320	1200	1040	6070	2020	1890	734	572	296	600
28	1580	5080	4080	1200	914	5070	5190	1610	651	497	272	550
29	1850	3800	3260	1150	852	5870	10400	1650	706	651	268	430
30	2070	3320	2860	1100	---	8000	8220	1650	1240	734	260	450
31	1730	---	2620	1050	---	10000	---	1770	---	598	302	---
TOTAL	136890	86910	70350	57640	26474	159402	166460	108240	41009	21574	14057	11905
MEAN	4416	2897	2269	1859	913	5142	5549	3492	1357	696	453	397
MAX	12400	9920	6800	5920	1650	21700	13000	8580	1980	1140	1030	1150
MIN	1420	1350	1250	1050	651	572	2020	1610	651	450	260	220
(†)	251	236	250	251	251	248	248	249	271	305	294	265
MEAN‡	4666	3133	2520	2110	1164	5390	5796	3741	1638	1001	747	662
CFSM‡	2.47	1.66	1.33	1.11	.61	2.85	3.06	1.98	.87	.53	.39	.35
IN‡	2.84	1.85	1.53	1.29	.66	3.28	3.42	2.28	.97	.61	.46	.39

CAL YR 1979 TOTAL 1405602 MEAN 3851 MAX 62100 MIN 445 MEAN‡ 4109 CFSM‡ 2.17 IN‡ 29.47
WTR YR 1980 TOTAL 900911 MEAN 2462 MAX 21700 MIN 220 MEAN‡ 2721 CFSM‡ 1.44 IN‡ 19.57

† Diversion, equivalent in cubic feet per second, for municipal water supply, furnished by City of Philadelphia.
‡ Adjusted for diversion.

01474500 SCHUYLKILL RIVER AT PHILADELPHIA, PA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1945 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1963 to current year.
pH: January 1968 to current year.
WATER TEMPERATURES: October 1945 to current year.
DISSOLVED OXYGEN: January 1966 to current year.

REMARKS.--Water-quality recorder located at Belmont raw-water pumping station on west side of river near Columbia Bridge.

EXTREMES FOR PERIOD OF DAILY REOCRD.--
SPECIFIC CONDUCTANCE: Maximum, 972 micromhos June 25, 1965; minimum, 92 micromhos Feb. 26, 1979.
pH: Maximum, 10.1 Aug. 12, 1969; minimum, 5.7 Dec. 21, 1973.
WATER TEMPERATURES: Maximum, 32.0°C Aug. 5, 10, 1980; minimum, freezing point on many days during winter months.
DISSOLVED OXYGEN: Maximum, 18.3 mg/L Jan. 11, 1978; minimum, 0.4 mg/L July 24, 1971.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 571 micromhos Sept. 3; minimum, 158 micromhos Nov. 27.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	---	---	---	13.0	11.5	12.0	8.0	7.0	7.5	5.0	4.5	5.0
2	---	---	---	14.0	12.0	13.0	7.0	6.0	6.5	5.0	4.5	5.0
3	---	---	---	14.0	14.0	14.0	6.5	5.0	5.5	4.5	4.0	4.5
4	---	---	---	14.0	12.0	13.0	6.0	4.5	5.0	4.5	3.5	4.0
5	---	---	---	12.0	11.0	11.5	6.5	5.0	5.5	3.5	3.5	3.5
6	---	---	---	11.0	10.5	11.0	6.5	5.5	6.0	4.0	3.0	3.0
7	---	---	---	11.0	10.5	10.5	7.5	6.5	7.0	3.0	2.5	3.0
8	---	---	---	11.0	10.0	10.5	8.0	6.5	7.0	4.0	3.0	3.5
9	---	---	---	11.5	10.5	11.0	7.0	6.5	6.5	3.5	3.0	3.5
10	---	---	---	12.5	11.5	12.0	7.0	6.0	6.5	3.5	2.5	3.0
11	---	---	---	13.0	12.5	12.5	7.5	6.0	6.5	5.5	3.0	4.0
12	12.5	12.5	12.5	13.0	12.5	12.5	8.0	6.5	7.0	6.0	4.0	5.0
13	13.0	12.5	12.5	12.0	11.5	11.5	8.0	7.5	8.0	4.0	3.5	3.5
14	13.0	12.0	12.5	11.5	10.5	11.5	8.0	7.5	8.0	4.5	3.5	4.0
15	13.0	12.0	12.5	11.0	10.0	10.5	7.5	6.5	7.5	6.0	4.5	5.0
16	13.0	12.0	12.5	10.5	9.5	10.0	7.0	6.5	6.5	6.5	5.0	5.5
17	13.5	12.5	13.0	10.0	9.0	9.5	6.5	4.5	6.0	7.0	6.0	6.5
18	14.5	13.0	14.0	10.5	9.0	9.5	4.5	3.5	4.0	6.5	6.5	6.5
19	15.5	13.5	14.5	10.5	9.5	10.0	3.5	2.5	3.0	7.0	6.5	6.5
20	16.5	15.0	15.5	10.5	10.0	10.0	3.0	2.5	2.5	6.5	5.5	6.5
21	18.0	16.0	17.0	11.0	9.5	10.5	2.5	2.0	2.5	6.0	5.0	5.5
22	18.5	17.0	18.0	11.5	10.5	11.0	3.5	2.5	3.0	5.0	5.0	5.0
23	19.5	18.0	18.5	12.0	11.0	11.5	4.5	3.5	4.0	5.5	5.0	5.0
24	---	---	---	13.0	11.5	12.5	5.5	4.5	5.0	4.5	3.5	4.0
25	---	---	---	13.5	12.0	13.0	7.0	5.5	6.5	3.5	3.5	3.5
26	14.0	13.0	14.0	16.0	13.5	14.5	7.5	7.0	7.5	4.0	2.5	3.5
27	13.5	12.5	12.5	16.0	13.5	15.0	7.5	6.5	7.0	4.0	3.0	3.5
28	---	---	---	13.5	12.5	13.0	6.5	5.5	6.0	3.5	3.0	3.5
29	12.5	11.5	12.0	12.5	9.5	11.0	6.0	5.5	5.5	---	---	---
30	12.5	11.0	12.0	9.5	8.0	9.0	6.0	5.5	5.5	---	---	---
31	12.5	11.0	11.5	---	---	---	6.0	5.0	5.5	---	---	---
MONTH	19.5	11.0	14.0	16.0	8.0	11.5	8.0	2.0	6.0	7.0	2.5	4.5

01474500 SCHUYLKILL RIVER AT PHILADELPHIA, PA--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	---	---	---	3.0	2.0	3.0	8.0	7.5	8.0	19.0	17.5	18.5
2	---	---	---	2.0	1.5	2.0	10.0	8.0	9.5	20.0	19.5	19.5
3	---	---	---	2.5	1.5	2.0	11.5	9.5	11.0	20.5	20.0	20.5
4	2.5	1.5	---	3.5	1.5	2.5	12.0	11.0	11.5	20.5	16.5	17.5
5	3.5	2.5	3.0	4.5	3.0	4.0	11.5	10.5	11.0	19.5	17.5	18.0
6	---	---	---	6.5	4.5	5.5	12.5	10.5	11.5	20.0	18.0	19.0
7	---	---	---	6.5	5.5	6.0	13.5	11.5	12.5	21.0	19.5	20.0
8	---	---	---	8.0	6.5	7.0	14.5	12.5	13.5	20.5	19.0	20.0
9	---	---	---	9.5	7.5	8.5	14.5	13.5	14.0	19.0	17.5	18.5
10	---	---	---	11.0	8.5	9.5	14.5	13.5	14.0	18.5	17.0	17.5
11	---	---	---	10.0	8.5	9.5	15.0	13.5	14.0	18.0	17.0	17.5
12	---	---	---	9.0	7.5	8.0	15.0	13.5	14.5	18.0	17.0	17.5
13	---	---	---	7.5	5.5	6.5	15.5	14.0	14.5	18.5	17.5	18.0
14	---	---	---	6.0	4.5	5.5	15.0	14.0	14.5	19.5	18.0	18.5
15	---	---	---	5.5	4.0	4.5	14.5	13.5	14.0	19.5	18.0	18.5
16	5.0	4.5	4.5	6.0	3.5	5.0	13.5	11.5	13.0	20.0	18.0	19.0
17	5.5	4.5	5.0	7.5	5.5	6.0	12.5	10.5	11.5	20.0	18.5	19.0
18	5.5	5.5	5.5	7.5	6.5	7.0	13.0	11.0	12.0	18.5	18.5	18.5
19	5.5	5.5	5.5	8.0	6.5	7.5	14.5	12.5	13.5	19.5	18.5	19.0
20	---	---	---	8.0	6.5	7.5	14.5	14.0	14.0	19.5	18.5	19.0
21	---	---	---	9.5	7.5	8.5	---	---	---	19.0	18.5	19.0
22	---	---	---	9.5	7.0	8.0	---	---	---	20.0	18.5	19.0
23	---	---	---	7.5	6.5	7.0	17.5	16.0	16.5	21.0	19.5	20.5
24	---	---	---	7.5	6.5	7.0	18.0	16.0	17.0	22.5	20.5	21.5
25	7.0	6.0	---	8.0	7.5	7.5	18.5	17.0	17.5	24.0	22.0	23.0
26	6.5	5.5	6.0	8.0	7.0	7.5	17.5	17.0	17.5	23.5	21.5	22.5
27	5.5	4.5	5.0	8.5	7.0	8.0	17.0	16.0	16.5	22.5	21.0	21.5
28	5.0	4.5	4.5	9.0	8.0	8.5	16.0	14.0	15.0	22.5	20.5	21.5
29	4.5	3.0	4.0	9.5	8.5	9.0	17.0	12.0	14.5	22.5	20.5	21.5
30	---	---	---	9.5	9.5	9.5	17.5	12.5	14.5	22.5	21.0	22.0
31	---	---	---	9.5	8.0	9.0	---	---	---	22.5	21.0	22.0
MONTH	7.0	1.5	5.0	11.0	1.5	6.5	18.5	7.5	13.5	24.0	16.5	19.5

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	24.0	21.5	23.0	28.5	26.0	27.5	30.0	28.0	29.0	29.0	27.5	28.5
2	24.5	23.0	24.0	28.0	26.5	27.5	30.0	28.5	29.5	30.0	28.0	29.0
3	25.0	23.5	24.0	27.5	27.0	27.5	31.0	29.0	30.0	30.0	28.5	29.0
4	25.0	23.0	24.0	28.5	26.5	27.5	31.0	29.0	30.0	30.0	27.5	28.5
5	24.5	22.5	23.5	28.0	26.5	27.5	32.0	30.0	31.0	28.5	27.5	28.0
6	---	---	---	27.5	26.5	27.0	30.5	27.5	29.0	29.5	27.5	28.0
7	---	---	---	27.5	25.5	26.5	31.0	28.5	29.5	28.5	27.0	27.5
8	---	---	---	26.5	25.5	26.0	31.0	29.5	30.5	28.0	26.5	27.0
9	---	---	---	27.5	25.0	26.0	31.5	30.0	30.5	27.0	25.5	26.5
10	22.5	21.5	22.0	28.0	26.0	27.0	32.0	29.5	30.5	27.0	25.5	26.0
11	22.5	20.5	21.5	28.0	26.0	27.0	31.0	29.5	30.5	26.0	25.0	25.5
12	23.0	20.5	22.0	28.5	27.0	27.5	30.5	29.0	29.5	27.0	24.5	25.5
13	23.5	21.5	22.5	28.0	26.0	27.0	30.0	28.0	29.0	26.5	25.0	26.0
14	24.5	22.5	23.0	28.5	26.0	27.5	29.0	28.0	28.5	26.0	25.5	25.5
15	25.0	23.5	24.5	28.5	27.0	28.0	29.0	28.0	28.5	25.5	24.5	25.0
16	25.5	24.0	24.5	29.0	27.5	28.0	28.5	27.0	28.0	26.5	23.0	23.5
17	24.5	23.5	24.0	28.5	28.0	28.5	28.0	26.5	27.0	23.0	22.5	23.0
18	24.5	23.0	23.5	29.5	28.0	28.5	27.0	25.5	26.0	23.5	22.5	23.0
19	25.0	22.5	23.5	29.5	28.5	29.0	26.5	25.5	26.0	24.0	22.5	23.0
20	23.5	22.5	23.0	29.0	27.5	28.5	27.0	25.5	26.0	23.5	22.5	23.0
21	23.0	21.5	22.5	31.5	29.0	30.5	26.0	24.5	25.5	24.5	22.5	23.5
22	25.5	22.0	24.0	31.5	30.5	31.0	25.5	24.0	24.5	25.5	24.0	24.5
23	26.5	23.5	25.0	30.5	29.0	29.5	27.0	24.5	25.5	26.0	24.5	25.5
24	26.5	24.5	25.5	30.0	28.0	29.0	27.5	25.0	26.0	25.0	23.0	24.0
25	27.0	25.0	26.0	30.0	28.0	29.0	28.5	25.5	26.5	23.5	22.0	22.5
26	27.0	25.5	26.0	30.5	28.5	29.5	27.5	26.0	27.0	22.5	22.0	22.5
27	27.5	25.5	26.5	30.0	28.0	29.5	28.0	27.0	27.5	22.0	20.5	21.5
28	28.5	26.5	27.5	29.5	28.5	29.0	29.0	27.5	28.0	21.0	19.5	20.5
29	28.5	26.5	27.5	29.5	27.5	28.5	29.0	26.5	28.0	21.0	19.5	20.5
30	27.5	27.0	27.0	29.5	27.5	28.5	28.5	27.0	28.0	21.0	19.5	20.0
31	---	---	---	29.5	28.0	29.0	28.5	27.0	27.5	---	---	---
MONTH	28.5	20.5	24.0	31.5	25.0	28.0	32.0	24.0	28.0	30.0	19.5	25.0
YEAR	32.0	1.5	16.0									

01474500 SCHUYLKILL RIVER AT PHILADELPHIA, PA--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	265	211	231	337	330	333	255	245	248	283	273	279
2	249	196	214	344	322	335	267	255	263	287	276	280
3	211	178	198	332	301	319	279	267	273	286	276	281
4	215	202	209	297	249	261	280	269	274	318	282	293
5	214	192	205	285	260	271	281	274	278	338	304	316
6	217	200	206	302	274	288	287	280	283	329	316	321
7	206	201	203	301	276	292	300	287	293	330	318	323
8	208	201	204	278	272	275	302	297	300	345	327	336
9	224	207	213	279	272	274	302	295	298	350	340	344
10	220	215	218	284	276	280	305	298	301	356	340	349
11	223	218	220	283	275	279	306	299	302	405	356	366
12	247	203	224	281	268	274	317	305	311	409	317	373
13	249	235	243	271	253	261	317	309	312	315	299	306
14	254	247	251	287	253	272	321	312	316	333	300	319
15	260	250	253	305	286	295	328	317	322	355	333	345
16	266	259	263	316	305	310	329	308	319	351	342	346
17	272	266	270	317	309	313	326	307	319	360	344	349
18	288	271	279	316	303	310	334	325	331	362	354	358
19	295	281	287	319	307	313	361	332	339	358	348	352
20	312	290	298	319	314	317	366	347	356	351	327	337
21	313	300	308	324	317	320	366	352	357	329	321	326
22	316	309	312	322	314	318	378	366	371	338	320	331
23	339	315	320	326	312	318	380	370	375	371	338	352
24	---	---	---	333	323	327	388	367	376	361	343	354
25	---	---	---	345	331	336	388	336	366	373	353	361
26	320	308	314	345	201	309	334	257	291	389	362	374
27	338	320	326	192	158	171	305	257	289	393	381	387
28	---	---	---	268	193	239	286	254	272	401	381	390
29	368	324	342	268	260	265	253	249	251	---	---	---
30	339	317	330	260	244	249	265	253	258	---	---	---
31	337	330	333	---	---	---	286	264	272	---	---	---
MONTH	368	178	260	345	158	291	388	245	307	409	273	337

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	---	---	---	418	404	408	228	190	196	231	228	230
2	---	---	---	422	408	414	207	188	196	232	229	231
3	---	---	---	452	419	433	236	208	223	235	231	232
4	449	420	---	426	419	422	233	225	229	257	235	248
5	432	423	427	469	427	454	225	210	214	251	242	246
6	---	---	---	468	455	462	232	212	224	255	250	253
7	---	---	---	459	446	452	249	231	240	261	251	257
8	---	---	---	446	428	436	250	246	248	268	257	263
9	---	---	---	434	415	422	263	233	246	276	266	272
10	---	---	---	451	423	443	237	225	230	278	266	274
11	---	---	---	416	388	403	244	224	230	288	272	280
12	---	---	---	406	362	379	248	228	235	289	281	285
13	---	---	---	503	344	375	233	228	231	289	237	274
14	---	---	---	423	388	402	255	231	244	237	204	220
15	---	---	---	387	362	378	258	243	250	265	237	257
16	474	467	470	363	345	354	254	245	248	256	247	251
17	474	471	473	349	334	345	263	247	253	254	244	247
18	473	470	472	328	222	263	269	258	265	256	246	251
19	482	471	477	282	238	267	281	253	269	271	253	265
20	483	477	481	268	247	257	281	276	279	284	262	271
21	485	476	---	255	194	244	---	---	---	287	264	276
22	---	---	---	207	164	183	---	---	---	303	277	289
23	---	---	---	201	183	191	266	255	261	284	277	281
24	---	---	---	206	190	198	274	262	268	307	275	294
25	426	407	---	206	196	201	291	272	282	287	266	277
26	434	423	429	206	194	198	299	284	291	298	266	280
27	431	412	422	220	206	213	313	293	299	294	265	281
28	431	405	414	232	221	228	317	304	311	287	260	273
29	410	402	406	237	229	234	311	211	253	298	261	278
30	---	---	---	234	217	224	234	211	229	304	277	292
31	---	---	---	229	200	216	---	---	---	318	285	304
MONTH	485	402	447	503	164	326	317	188	248	318	204	266

01474500 SCHUYLKILL RIVER AT PHILADELPHIA, PA--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	326	293	312	442	408	427	401	385	393	545	463	513
2	377	301	341	445	434	439	394	384	390	549	471	513
3	361	342	350	439	433	436	401	388	395	571	459	512
4	362	331	343	438	404	423	456	391	428	535	442	497
5	358	338	349	413	389	399	448	424	437	540	462	519
6	389	353	375	402	384	393	435	305	350	549	509	532
7	389	371	385	414	391	406	397	336	374	553	508	537
8	385	372	378	429	400	417	453	382	418	563	519	550
9	389	371	381	442	427	436	456	439	448	568	553	563
10	387	352	364	448	437	444	455	421	439	570	559	565
11	360	347	354	448	434	440	432	409	423	567	542	554
12	359	345	353	438	418	430	464	416	441	547	493	519
13	352	345	348	432	405	422	465	443	451	504	479	495
14	357	348	352	434	415	425	468	434	454	503	489	496
15	367	358	363	434	421	430	446	436	440	517	493	504
16	375	364	368	446	391	419	464	438	454	559	510	532
17	374	366	371	401	357	376	478	458	468	560	550	555
18	376	367	372	424	391	410	509	463	491	556	383	440
19	384	362	376	434	411	424	517	498	511	525	426	507
20	378	370	374	426	405	414	509	471	496	538	524	530
21	373	350	361	411	400	405	495	433	479	540	531	535
22	374	355	362	422	404	416	508	418	478	534	508	522
23	404	371	384	417	371	395	526	438	491	511	492	505
24	406	388	396	406	371	395	538	452	505	524	510	514
25	421	405	410	402	391	397	536	464	512	529	493	511
26	426	414	420	416	376	398	533	466	509	508	458	485
27	429	409	419	404	371	389	---	---	---	469	415	436
28	418	402	409	405	384	395	---	---	---	430	406	416
29	413	396	405	413	391	402	538	499	---	488	422	455
30	418	391	405	414	389	402	---	---	---	531	467	497
31	---	---	---	401	387	395	---	---	---	---	---	---
MONTH	429	293	373	448	357	413	538	305	449	571	383	510
YEAR	571	158	346									

OXYGEN, DISSOLVED (DO), MG/L, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	---	---	---	9.8	9.5	9.7	---	---	---	12.6	12.3	12.4
2	---	---	---	9.7	9.4	9.6	---	---	---	12.5	12.2	12.4
3	---	---	---	10.0	9.7	9.9	---	---	---	12.8	12.5	12.6
4	---	---	---	10.4	10.1	10.3	13.1	12.7	---	12.8	12.4	12.6
5	---	---	---	11.5	10.6	10.8	12.7	12.4	12.6	12.7	12.4	12.6
6	---	---	---	10.7	10.2	10.4	12.4	12.0	12.3	13.0	12.5	12.8
7	---	---	---	10.7	10.3	10.6	12.1	11.7	11.9	13.2	12.9	13.0
8	---	---	---	10.7	10.5	10.6	12.0	11.7	11.8	13.2	12.9	13.1
9	---	---	---	10.8	10.1	10.4	12.2	11.8	12.0	13.4	13.0	13.2
10	---	---	---	10.1	9.6	9.8	12.4	11.8	12.1	13.6	13.4	13.5
11	---	---	---	---	---	---	12.2	11.8	12.0	13.5	12.9	13.2
12	10.2	10.1	---	---	---	---	11.9	11.6	11.8	13.2	12.5	12.8
13	10.4	10.2	10.3	---	---	---	11.6	11.0	11.2	13.4	13.2	13.3
14	10.7	10.3	10.5	7.7	6.8	---	11.6	11.0	11.3	13.2	13.0	13.1
15	10.9	10.6	10.7	7.6	7.2	7.5	12.1	11.4	11.8	13.0	12.6	12.8
16	10.9	10.8	10.8	8.2	7.6	8.0	11.9	11.7	11.8	12.6	12.3	12.5
17	10.8	10.7	10.8	8.3	8.2	8.3	12.6	11.6	12.2	12.3	12.1	12.2
18	10.8	10.4	10.6	8.4	8.3	8.4	13.0	12.4	12.7	12.2	11.8	11.9
19	10.5	10.2	10.3	8.4	8.3	8.4	13.1	12.7	12.9	12.1	11.7	11.9
20	10.2	9.7	10.0	---	---	---	13.3	12.9	13.1	12.4	11.9	12.2
21	9.7	9.2	9.5	---	---	---	13.5	13.0	13.2	12.4	12.1	12.2
22	9.4	9.1	9.3	---	---	---	13.3	13.0	13.1	12.6	12.1	12.4
23	9.2	8.4	8.9	---	---	---	13.0	12.5	12.8	12.5	12.0	12.3
24	---	---	---	---	---	---	12.5	12.1	12.3	12.3	11.9	12.1
25	---	---	---	---	---	---	12.1	11.7	11.9	12.6	12.1	12.4
26	9.2	8.7	9.0	---	---	---	11.8	11.6	11.7	12.7	12.4	12.6
27	10.0	9.0	9.6	---	---	---	12.3	11.7	12.0	12.7	12.4	12.6
28	---	---	---	---	---	---	12.6	12.1	12.3	12.8	11.4	12.4
29	9.2	7.8	8.7	---	---	---	12.7	12.2	12.4	---	---	---
30	9.7	9.3	9.6	---	---	---	12.5	12.1	12.3	---	---	---
31	9.7	9.6	9.6	---	---	---	12.6	12.1	12.3	---	---	---
MONTH	10.9	7.8	9.9	11.5	6.8	9.5	13.5	11.0	12.2	13.6	11.4	12.6

01474500 SCHUYLKILL RIVER AT PHILADELPHIA, PA--Continued

OXYGEN, DISSOLVED (DO), MG/L, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	---	---	---	13.1	12.8	12.9	12.0	11.4	11.8	---	---	---
2	---	---	---	13.4	12.6	13.1	11.7	11.1	11.3	---	---	---
3	---	---	---	13.6	12.9	13.1	11.4	10.9	11.2	---	---	---
4	14.9	13.8	---	13.4	13.0	13.2	10.9	10.4	10.6	9.8	9.2	---
5	14.1	11.6	13.1	13.1	12.1	12.5	10.8	10.4	10.6	9.6	8.8	9.2
6	---	---	---	12.1	11.7	11.9	10.9	10.5	10.8	9.0	8.5	8.7
7	---	---	---	11.7	11.2	11.6	11.0	10.3	10.6	9.0	8.0	8.5
8	---	---	---	11.5	10.9	11.3	10.5	10.0	10.3	9.3	7.8	8.4
9	---	---	---	11.3	10.6	11.0	10.1	9.4	9.8	9.6	8.1	8.9
10	---	---	---	11.2	10.3	10.8	10.0	9.6	9.8	10.1	8.6	9.2
11	---	---	---	11.0	10.2	10.5	10.1	9.7	9.9	9.2	8.5	8.8
12	---	---	---	11.1	10.4	10.8	10.2	9.6	9.9	9.0	8.3	8.6
13	---	---	---	11.6	11.0	11.3	10.2	9.4	9.8	8.9	8.2	8.6
14	---	---	---	12.0	11.4	11.7	9.6	9.1	9.3	9.4	8.4	8.9
15	---	---	---	13.2	12.1	12.6	9.5	8.9	9.3	9.2	8.7	9.0
16	12.4	11.8	12.1	13.3	12.6	12.9	9.9	9.3	9.6	9.5	8.8	9.1
17	11.8	11.2	11.6	12.7	11.8	12.3	10.5	9.6	10.2	9.6	8.7	9.1
18	11.4	9.9	10.8	12.0	11.7	11.8	9.8	9.3	9.6	9.1	8.7	8.9
19	9.8	8.3	8.9	11.8	11.4	11.7	---	---	---	9.0	8.4	8.7
20	---	---	---	11.9	11.4	11.8	---	---	---	8.6	8.2	8.3
21	---	---	---	11.5	10.0	11.0	---	---	---	8.2	7.8	8.0
22	---	---	---	11.6	10.1	11.2	---	---	---	8.9	8.1	8.4
23	---	---	---	12.1	11.6	11.9	10.8	9.2	9.9	8.7	8.2	8.5
24	---	---	---	11.9	11.7	11.9	10.6	9.0	9.7	9.5	6.9	8.0
25	11.9	11.6	---	11.8	11.6	11.7	9.8	8.8	9.2	9.3	7.8	8.5
26	12.1	11.4	11.7	11.9	11.8	11.8	9.3	8.6	9.0	9.1	7.8	8.5
27	12.2	11.7	12.0	12.1	11.7	11.9	9.3	8.7	9.0	9.6	7.8	8.9
28	12.3	11.8	12.0	11.7	11.3	11.5	9.6	8.6	9.1	11.0	8.4	9.6
29	12.9	11.8	12.4	11.4	11.0	11.2	---	---	---	10.0	7.6	8.9
30	---	---	---	11.3	11.0	11.2	---	---	---	9.8	7.7	8.7
31	---	---	---	11.5	11.0	11.1	---	---	---	8.8	7.6	8.3
MONTH	14.9	8.3	11.6	13.6	10.0	11.8	12.0	8.6	10.0	11.0	6.9	8.7

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	10.9	7.4	8.9	13.6	6.6	10.3	---	---	---	11.5	7.3	9.1
2	9.1	7.5	8.4	11.8	8.1	10.3	---	---	---	10.8	7.3	9.1
3	8.6	6.8	7.5	9.7	5.2	7.4	---	---	---	12.1	6.8	9.3
4	8.1	6.2	7.2	12.4	4.3	8.3	---	---	---	11.1	5.9	8.4
5	---	---	---	11.1	7.1	9.4	---	---	---	8.8	6.4	7.6
6	---	---	---	10.2	6.0	8.0	---	---	---	11.2	5.7	8.0
7	---	---	---	12.5	7.2	9.8	---	---	---	12.3	7.0	9.6
8	---	---	---	9.7	6.8	8.1	10.4	8.9	---	13.2	8.1	10.6
9	---	---	---	---	---	---	9.8	6.5	8.4	10.5	6.3	8.4
10	10.0	7.2	8.7	---	---	---	11.2	5.3	7.9	11.4	5.4	8.2
11	10.3	7.6	8.9	---	---	---	10.7	5.3	8.0	8.4	6.1	6.9
12	11.5	8.0	9.7	---	---	---	7.8	4.7	6.3	---	---	---
13	---	---	---	---	---	---	10.7	5.1	7.7	---	---	---
14	---	---	---	---	---	---	10.4	5.6	7.8	---	---	---
15	---	---	---	---	---	---	8.5	6.1	7.2	---	---	---
16	---	---	---	---	---	---	8.3	4.2	6.2	7.3	5.7	---
17	---	---	---	---	---	---	10.4	4.9	7.2	5.5	3.9	4.4
18	---	---	---	---	---	---	8.4	5.7	7.2	4.9	3.8	4.3
19	---	---	---	---	---	---	8.3	5.4	6.7	10.1	4.0	6.6
20	---	---	---	---	---	---	10.2	6.0	8.1	7.5	6.0	6.7
21	---	---	---	---	---	---	10.3	7.0	8.5	8.4	4.4	6.2
22	---	---	---	---	---	---	8.6	6.4	7.5	8.1	5.2	6.4
23	---	---	---	---	---	---	9.3	5.8	7.5	10.6	5.7	7.5
24	14.5	12.4	---	---	---	---	10.6	6.3	8.4	8.7	4.2	6.3
25	14.0	10.5	12.4	---	---	---	14.5	7.1	10.0	---	---	---
26	14.3	9.5	12.2	---	---	---	13.4	10.5	12.0	---	---	---
27	13.5	8.9	11.6	---	---	---	---	---	---	---	---	---
28	13.8	9.7	12.1	---	---	---	---	---	---	---	---	---
29	13.0	7.8	11.0	---	---	---	12.0	6.3	---	---	---	---
30	10.9	6.7	8.6	---	---	---	11.4	7.0	9.1	---	---	---
31	---	---	---	---	---	---	9.1	6.7	7.8	---	---	---
MONTH	14.5	6.2	9.8	13.6	4.3	9.0	14.5	4.2	8.0	13.2	3.8	7.6

01474500 SCHUYLKILL RIVER AT PHILADELPHIA, PA--Continued

PH (STANDARD UNITS), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	7.0	6.9	6.9	7.3	7.2	7.2	7.1	7.1	7.1	7.3	7.2	7.2
2	7.0	6.7	6.8	7.4	7.2	7.3	7.2	7.1	7.1	7.3	7.1	7.2
3	6.8	6.7	6.7	7.3	7.1	7.2	7.2	7.1	7.1	7.3	7.2	7.3
4	6.8	6.5	6.7	7.2	7.0	7.0	7.2	7.1	7.1	7.3	7.2	7.3
5	6.9	6.8	6.8	7.2	7.0	7.1	7.2	7.1	7.2	7.3	7.2	7.3
6	6.8	6.8	6.8	7.1	7.0	7.1	7.2	7.2	7.2	7.3	7.2	7.3
7	6.8	6.7	6.8	7.1	7.0	7.0	7.3	7.2	7.2	7.3	7.2	7.2
8	6.8	6.6	6.7	7.1	7.0	7.1	7.3	7.2	7.2	7.3	7.2	7.2
9	7.0	6.6	6.7	7.1	7.0	7.1	7.2	7.2	7.2	7.2	7.1	7.2
10	6.9	6.7	6.7	7.1	7.1	7.1	7.3	7.1	7.2	7.3	7.1	7.2
11	6.7	6.7	6.7	7.2	7.1	7.1	7.2	7.1	7.2	7.3	7.2	7.3
12	6.9	6.7	6.8	7.2	7.1	7.1	7.2	7.1	7.2	7.4	7.1	7.3
13	7.1	6.9	7.0	7.1	7.1	7.1	7.2	7.1	7.2	7.1	7.0	7.1
14	7.1	7.0	7.1	7.2	7.1	7.2	7.3	7.1	7.2	7.2	7.0	7.1
15	7.1	7.1	7.1	7.2	7.1	7.2	7.2	7.1	7.2	7.3	7.1	7.2
16	7.1	7.1	7.1	7.2	7.2	7.2	7.1	7.1	7.1	7.3	7.2	7.2
17	7.1	7.1	7.1	7.3	7.2	7.2	7.3	7.1	7.2	7.3	7.2	7.3
18	7.1	7.1	7.1	7.2	7.1	7.1	7.3	7.1	7.2	7.3	7.2	7.3
19	7.1	7.1	7.1	7.2	7.1	7.1	7.2	7.1	7.2	7.3	7.2	7.3
20	7.1	7.1	7.1	7.2	7.1	7.1	7.3	7.2	7.2	7.2	7.2	7.2
21	7.1	7.1	7.1	7.2	7.1	7.1	7.2	7.1	7.2	7.2	7.1	7.2
22	7.2	7.0	7.1	7.2	7.1	7.1	7.2	7.1	7.2	7.3	7.2	7.2
23	7.2	7.1	7.1	7.3	7.1	7.2	7.2	7.1	7.2	7.3	7.1	7.2
24	---	---	---	7.3	7.2	7.2	7.2	7.1	7.2	7.2	7.1	7.1
25	---	---	---	7.3	7.2	7.2	7.3	7.1	7.2	7.2	7.1	7.1
26	7.3	7.2	7.2	7.3	7.0	7.2	7.2	7.1	7.1	7.2	7.0	7.1
27	7.4	7.2	7.3	6.9	6.7	6.8	7.2	7.0	7.1	7.2	7.0	7.1
28	---	---	---	7.1	6.9	7.0	7.2	7.1	7.1	7.1	7.0	7.1
29	7.3	7.2	7.3	7.1	7.0	7.1	7.3	7.1	7.2	---	---	---
30	7.4	7.2	7.3	7.1	7.0	7.1	7.3	7.2	7.2	---	---	---
31	7.3	7.2	7.3	---	---	---	7.3	7.2	7.2	---	---	---
MONTH	7.4	6.5	7.0	7.4	6.7	7.1	7.3	7.0	7.2	7.4	7.0	7.2

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	---	---	---	---	---	---	7.7	7.6	7.7	7.0	6.2	6.9
2	---	---	---	---	---	---	7.7	7.6	7.7	7.0	6.9	7.0
3	---	---	---	---	---	---	7.7	7.2	7.5	7.0	6.9	7.0
4	7.1	7.0	---	---	---	---	7.4	7.3	7.4	7.5	7.0	7.4
5	7.0	6.9	7.0	---	---	---	7.4	7.3	7.3	7.4	7.3	7.4
6	---	---	---	---	---	---	7.4	7.3	7.4	7.4	7.3	7.3
7	---	---	---	---	---	---	7.5	7.4	7.5	7.4	7.3	7.4
8	---	---	---	7.9	7.8	---	7.5	7.4	7.5	7.5	7.3	7.4
9	---	---	---	8.0	7.8	7.9	7.5	7.4	7.5	7.5	7.2	7.3
10	---	---	---	8.1	7.8	7.9	7.4	7.3	7.3	7.5	7.3	7.4
11	---	---	---	7.9	7.7	7.8	7.3	7.2	7.3	7.4	7.3	7.4
12	---	---	---	7.8	7.7	7.7	7.4	7.2	7.3	7.4	7.3	7.3
13	---	---	---	7.7	7.6	7.7	7.4	7.2	7.3	7.4	7.2	7.3
14	---	---	---	7.9	7.6	7.7	7.4	7.3	7.3	7.2	7.1	7.1
15	---	---	---	7.7	7.6	7.7	7.4	7.3	7.3	7.3	7.2	7.2
16	---	---	---	7.8	7.7	7.8	7.3	7.3	7.3	7.3	7.2	7.3
17	---	---	---	7.8	7.7	7.8	7.3	7.2	7.3	7.4	7.2	7.3
18	---	---	---	7.8	7.5	7.7	7.3	7.2	7.3	7.3	7.2	7.3
19	---	---	---	7.6	7.4	7.5	7.3	7.1	7.2	7.4	7.2	7.3
20	---	---	---	7.6	7.5	7.6	7.2	7.1	7.2	7.3	7.2	7.3
21	---	---	---	7.8	7.4	7.6	---	---	---	7.3	7.2	7.3
22	---	---	---	7.5	7.3	7.4	---	---	---	7.3	7.2	7.3
23	---	---	---	7.5	7.3	7.4	7.9	7.5	7.6	7.3	7.2	7.3
24	---	---	---	7.6	7.4	7.5	7.7	7.4	7.5	7.4	7.1	7.3
25	---	---	---	7.6	7.5	7.6	7.5	7.3	7.4	7.5	7.2	7.4
26	---	---	---	7.5	7.5	7.5	7.4	7.3	7.4	7.5	7.3	7.4
27	---	---	---	7.6	7.4	7.5	7.4	7.3	7.4	7.6	7.4	7.5
28	---	---	---	7.7	7.6	7.6	7.4	7.3	7.4	8.2	7.4	7.7
29	---	---	---	7.9	7.6	7.7	7.3	7.1	7.2	7.7	7.3	7.5
30	---	---	---	7.9	7.8	7.8	7.2	6.9	7.1	7.7	7.3	7.5
31	---	---	---	7.8	7.6	7.8	---	---	---	7.5	7.3	7.4
MONTH	7.1	6.9	7.0	8.1	7.3	7.7	7.9	6.9	7.4	8.2	6.2	7.3

01474500 SCHUYLKILL RIVER AT PHILADELPHIA, PA--Continued

PH (STANDARD UNITS), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	8.1	7.2	7.6	9.0	8.3	8.7	8.5	7.7	8.0	8.5	7.8	8.1
2	7.8	7.3	7.6	8.7	8.2	8.5	---	---	---	8.5	7.9	8.2
3	7.8	7.4	7.6	8.3	7.6	7.9	---	---	---	8.7	7.9	8.3
4	8.1	7.4	7.7	8.2	7.3	7.6	8.6	8.4	---	---	---	---
5	8.3	7.7	8.0	8.0	7.5	7.7	8.8	8.0	8.4	---	---	---
6	---	---	---	7.6	7.2	7.4	8.2	7.0	7.3	---	---	---
7	---	---	---	7.8	7.3	7.5	8.4	7.2	7.8	---	---	---
8	---	---	---	8.4	7.3	7.9	8.7	7.5	8.2	---	---	---
9	---	---	---	8.6	7.5	8.2	8.7	8.4	8.6	---	---	---
10	---	---	---	8.4	7.5	8.0	8.7	8.0	8.3	---	---	---
11	---	---	---	8.4	7.3	7.8	8.2	7.4	7.8	---	---	---
12	---	---	---	8.2	7.5	7.9	7.9	7.1	7.5	---	---	---
13	---	---	---	---	---	---	8.4	7.5	7.9	---	---	---
14	---	---	---	9.0	8.7	---	8.5	7.5	8.0	---	---	---
15	---	---	---	8.9	8.5	8.7	8.2	7.6	7.8	---	---	---
16	---	---	---	9.0	8.5	8.8	7.8	7.2	7.5	7.8	7.5	---
17	8.9	8.5	8.7	8.6	7.6	8.0	8.0	7.2	7.5	7.5	7.4	7.4
18	8.6	8.0	8.4	8.4	7.5	7.9	7.8	7.3	7.6	7.4	7.2	7.2
19	9.1	7.6	8.4	---	---	---	7.8	7.4	7.6	8.3	7.2	7.7
20	9.1	8.5	8.7	---	---	---	8.1	7.4	7.8	8.0	7.6	7.8
21	9.5	8.7	9.1	9.0	8.4	8.7	8.2	7.5	7.8	8.0	7.4	7.7
22	9.5	9.0	9.3	9.0	8.6	8.8	7.8	7.5	7.6	7.7	7.4	7.5
23	9.7	8.9	9.3	8.7	8.1	8.4	7.8	7.4	7.6	8.3	7.5	7.8
24	9.5	9.2	9.3	8.5	7.5	8.0	8.1	7.3	7.6	8.0	7.4	7.6
25	9.5	9.0	9.3	8.7	7.5	8.1	8.8	7.4	8.0	7.7	7.4	7.5
26	9.4	9.0	9.2	8.8	7.6	8.4	8.6	8.1	8.4	7.5	7.4	7.5
27	9.2	8.8	9.0	8.7	7.9	8.4	8.5	8.2	---	7.7	7.5	7.6
28	9.2	8.8	9.0	9.1	7.9	8.5	8.9	8.3	8.6	7.6	7.5	7.5
29	9.0	8.5	8.8	9.0	7.9	8.4	8.7	7.8	8.3	7.7	7.4	7.6
30	---	---	---	8.7	7.6	8.2	8.6	7.9	8.3	7.6	7.3	7.5
31	---	---	---	8.5	8.0	8.3	8.1	7.6	7.8	---	---	---
MONTH	9.7	7.2	8.6	9.1	7.2	8.2	8.9	7.0	7.9	8.7	7.2	7.7

01475000 MANTUA CREEK AT PITMAN, NJ

LOCATION.--Lat 39°44'14", long 75°06'53", Gloucester County, Hydrologic Unit 02040202 at bridge on Delsea Drive in Pitman, and 2.0 mi (3.2 km) upstream from Porch Branch.

DRAINAGE AREA.--6.05 mi² (15.67 km²).

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1958-59, 1962, 1975 to current year.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIOCHEM UNINHIB 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)	HARD-NESS (MG/L AS CACO3)
FEB 06...	0930	9.2	113	6.9	4.0	13.5	2.0	7	<2	36
APR 23...	0800	--	101	7.4	15.0	10.2	1.1	170	2	33
JUN 11...	0900	9.2	99	7.0	18.5	9.3	1.4	50	240	31
JUL 31...	1100	13	109	7.2	27.0	7.5	1.7	130	21	36
AUG 26...	1010	--	109	7.3	24.0	8.0	1.1	340	350	35

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
FEB 06...	8.2	3.7	4.3	2.2	12	0	10	19	9.1	.1
APR 23...	7.6	3.3	3.6	2.1	18	0	15	15	8.1	.1
JUN 11...	6.8	3.5	4.5	1.6	20	0	16	13	8.1	.1
JUL 31...	8.1	3.9	3.8	2.2	24	0	20	12	8.4	.1
AUG 26...	7.7	3.9	3.9	2.2	27	0	22	12	8.5	.1

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, ORTHOPH OSPHATE TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
FEB 06...	6.2	69	2.4	.060	.39	.45	2.8	<.01	1.4
APR 23...	2.4	72	1.5	.120	--	E.45	--	.23	--
JUN 11...	4.1	78	.97	.100	.17	.27	1.2	.10	1.8
JUL 31...	3.5	61	.57	.170	.69	.86	1.4	.06	4.1
AUG 26...	3.2	70	.65	.110	.43	.54	1.2	.06	3.3

01475045 MANTUA CREEK AT MANTUA, NJ

LOCATION.--Lat 39°47'42", long 75°10'21", Gloucester County, Hydrologic Unit 02040202, at bridge on State Route 45 in Mantua, 0.9 mi (1.4 km) downstream from Chestnut Branch, 1.3 mi (2.1 km) east of Gates of Heaven Memorial Park, and 2.4 mi (3.9 km) northwest of Barnsboro.

DRAINAGE AREA.--41.5 mi^2 (107.5 km^2).

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1975 to current year.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH FIELD (UNITS)	TEMPERATURE, WATER (DEG C)	OXYGEN, DISSOLVED (MG/L)	OXYGEN DEMAND, BIOCHEM UNINHIB 5 DAY (MG/L)	COLIFORM, FECAL, EC BROTH (MPN)	STREPTOCOCCI FECAL (MPN)	HARDNESS (MG/L AS CACO3)	CALCIUM DISSOLVED (MG/L AS CA)
FEB 06...	1300	191	7.2	1.0	12.8	1.7	130	46	53	15
APR 17...	1130	171	7.3	12.0	11.4	--	110	130	53	15
JUN 10...	1200	166	7.1	17.0	7.3	2.3	5400	2400	43	12
JUL 29...	1030	167	6.9	24.0	4.7	5.2	7900	35000	43	12
AUG 26...	1130	203	7.5	23.5	8.6	4.8	1700	1700	58	17

DATE	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)
FEB 06...	3.8	14	3.0	34	0	28	26	18	.2
APR 17...	3.7	--	2.9	34	0	28	24	13	.2
JUN 10...	3.1	12	2.4	43	0	35	20	13	.2
JUL 29...	3.2	12	3.5	39	0	32	17	14	.2
AUG 26...	3.7	14	3.3	55	0	45	22	15	.3

DATE	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, ORTHOPHOSPHATE TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
FEB 06...	9.5	116	1.9	.150	.27	.42	2.3	.02	3.0
APR 17...	7.6	96	1.4	.160	.36	.52	1.9	.22	2.9
JUN 10...	7.5	108	1.0	.120	.48	.60	1.6	.46	5.4
JUL 29...	8.1	112	.38	.120	1.3	1.4	1.8	.92	6.6
AUG 26...	13	123	.46	.110	.80	.91	1.4	.67	3.6

01477050 DELAWARE RIVER AT CHESTER, PA

LOCATION.--Lat 39°50'12", long 75°22'00", Delaware County, Hydrologic Unit 02040202, water-quality recorder located at auxiliary tidal-gaging station at end of Reynolds Aluminum Company pier, 0.5 mi (0.8 km) downstream from Chester Creek in Chester.

DRAINAGE AREA.--10,300 mi² (26,700 km²).

WATER-QUALITY DATA

PERIOD OF RECORD.--December 1961 to current year.

PERIOD DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1963 to current year.
pH: January 1968 to current year.
WATER TEMPERATURES: December 1961 to current year.
DISSOLVED OXYGEN: December 1961 to current year.

REMARKS.--Not operated July 11, 1980, through Sept. 30, 1980. Other interruptions in the record were due to malfunctions of the instrument.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 5,900 micromhos Oct. 7, 1965; minimum, 111 micromhos Apr. 26, 27, 1972.
pH: Maximum, 8.7 Sept. 13, 14, 1971 and Oct. 16, 1979; minimum 5.5 Dec. 10, 11, 1969.
WATER TEMPERATURES: Maximum, 33.0°C July 21, 1977; minimum, freezing point on many days during winter months.
DISSOLVED OXYGEN: Maximum, 13.5 mg/L Apr. 20, 1979; minimum, 0.0 mg/L on many days.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	20.5	20.0	20.0	15.0	13.5	14.0	10.5	9.5	10.0	---	---	---
2	21.0	19.5	20.5	15.5	13.5	14.5	10.5	8.5	10.0	---	---	---
3	21.0	20.0	20.5	15.0	13.5	14.0	10.0	8.5	9.5	---	---	---
4	20.5	19.5	20.0	14.5	13.0	13.5	9.5	8.5	9.0	---	---	---
5	---	---	---	14.0	13.0	13.5	9.5	8.5	9.0	---	---	---
6	---	---	---	14.0	13.0	13.5	10.0	8.5	9.0	---	---	---
7	---	---	---	14.0	13.0	13.5	10.0	8.5	9.0	---	---	---
8	---	---	---	14.0	12.5	13.0	9.5	7.5	8.5	---	---	---
9	17.0	16.5	---	14.0	12.5	13.5	8.5	7.0	7.5	---	---	---
10	16.5	14.5	15.5	14.0	13.0	13.5	8.5	7.0	7.5	---	---	---
11	15.0	14.0	14.5	13.0	12.5	13.0	9.0	7.5	8.0	---	---	---
12	15.0	14.0	14.5	13.0	12.0	12.5	9.0	7.5	8.0	---	---	---
13	14.5	13.5	14.0	13.0	12.0	12.5	8.5	7.5	8.0	---	---	---
14	13.5	12.5	13.5	12.5	11.5	12.0	8.0	7.0	7.5	---	---	---
15	14.5	12.5	13.5	12.0	10.5	11.5	7.5	6.5	7.0	---	---	---
16	14.5	13.0	13.5	11.5	10.5	11.0	7.0	6.5	7.0	---	---	---
17	14.0	13.5	14.0	11.5	10.0	10.5	6.5	5.0	6.0	---	---	---
18	15.0	13.5	14.0	11.5	10.0	11.0	5.5	4.5	5.0	---	---	---
19	15.0	13.5	14.0	11.5	10.5	11.0	5.5	4.0	5.0	---	---	---
20	15.0	14.0	14.5	11.5	10.5	11.0	5.0	3.5	4.5	---	---	---
21	15.5	14.0	14.5	11.5	10.5	11.0	5.0	3.5	4.5	---	---	---
22	16.0	14.5	15.0	12.0	11.0	11.5	5.0	4.0	4.5	---	---	---
23	16.5	15.0	15.5	12.5	11.0	11.5	5.5	4.5	5.0	---	---	---
24	15.5	14.5	15.0	13.0	11.0	12.0	6.0	4.5	5.5	---	---	---
25	15.0	14.0	14.5	13.0	11.5	12.5	7.0	5.5	6.0	---	---	---
26	14.5	13.5	14.0	14.5	12.5	13.5	6.5	5.5	6.0	---	---	---
27	14.5	13.5	13.5	14.0	12.0	13.0	6.0	5.0	5.5	---	---	---
28	14.0	13.0	13.5	13.0	12.0	12.5	6.0	4.5	5.5	5.5	4.5	---
29	14.5	13.0	13.5	12.5	11.0	11.5	---	---	---	5.0	4.5	4.5
30	14.0	13.0	13.5	11.0	9.5	10.5	---	---	---	4.5	3.5	4.0
31	14.5	13.0	13.5	---	---	---	---	---	---	4.5	3.0	3.5
MONTH	21.0	12.5	15.0	15.5	9.5	12.5	10.5	3.5	7.0	5.5	3.0	4.0

01477050 DELAWARE RIVER AT CHESTER, PA--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	4.0	2.5	3.0	4.5	3.0	3.5	10.0	8.0	9.0	15.0	13.5	14.0
2	3.5	2.0	2.5	4.0	2.5	3.0	10.5	9.0	9.5	16.0	14.0	15.0
3	3.5	2.0	2.5	4.0	2.5	3.0	11.0	9.0	9.5	16.0	14.5	15.5
4	3.5	2.0	2.5	4.0	2.5	3.5	10.5	9.0	9.5	16.0	15.0	15.5
5	3.5	2.0	2.5	4.5	3.0	4.0	10.5	9.0	9.5	17.0	15.0	16.0
6	3.0	2.0	---	6.0	3.5	4.5	11.5	9.0	10.0	17.5	15.5	16.5
7	---	---	---	5.5	3.5	4.5	12.0	9.5	10.5	18.0	16.5	17.0
8	---	---	---	6.5	4.5	5.5	12.5	10.5	11.5	17.5	16.5	16.5
9	---	---	---	7.5	5.0	6.0	12.5	11.0	12.0	17.0	16.0	16.5
10	---	---	---	8.0	5.5	6.5	13.5	11.5	12.5	17.5	16.0	16.5
11	3.5	2.5	---	7.5	6.0	7.0	14.0	12.5	13.0	17.5	16.5	17.0
12	3.5	2.5	3.0	7.0	5.5	6.5	14.0	12.5	13.5	18.5	16.5	17.5
13	3.5	2.5	3.0	6.5	5.0	6.0	14.5	13.0	14.0	19.5	17.5	18.5
14	4.0	2.5	3.0	6.5	4.0	5.5	14.0	13.0	13.5	19.5	18.0	19.0
15	4.5	3.0	3.5	6.5	5.0	6.0	14.5	13.5	14.0	19.5	18.0	19.0
16	4.0	3.0	3.5	7.5	5.5	6.5	13.5	12.0	13.0	19.5	18.0	19.0
17	4.0	2.5	3.0	8.5	6.0	7.0	13.5	12.0	12.5	20.0	18.5	19.5
18	3.5	2.5	3.0	9.0	7.0	8.0	14.0	12.5	13.0	19.5	18.5	19.0
19	4.0	2.5	3.0	9.5	7.0	8.0	14.5	12.5	13.5	20.5	19.0	19.5
20	4.5	2.5	3.5	9.5	7.5	8.5	15.0	13.0	14.0	20.5	19.5	20.0
21	5.5	3.0	4.0	10.5	8.0	9.0	15.5	13.5	14.0	20.0	19.0	19.5
22	5.0	3.5	4.5	10.0	8.0	8.5	15.5	13.5	14.0	20.5	19.0	20.0
23	6.0	4.0	5.0	9.5	8.0	9.0	15.0	13.5	14.0	21.5	20.0	20.5
24	6.0	4.5	5.0	9.0	8.0	8.5	15.5	14.0	14.5	21.5	20.5	21.0
25	6.0	4.5	5.5	8.5	7.5	8.0	15.5	14.5	15.0	22.0	20.5	21.0
26	6.0	4.5	5.0	8.0	6.5	7.5	14.5	14.0	14.5	21.0	20.5	20.5
27	5.5	4.5	5.0	8.0	7.0	7.5	14.5	13.5	14.0	---	---	---
28	5.0	4.0	4.5	8.5	7.0	8.0	14.5	13.5	14.0	---	---	---
29	5.0	3.5	4.0	9.0	7.5	8.5	14.0	13.5	14.0	---	---	---
30	---	---	---	9.5	8.0	9.0	14.0	13.5	14.0	---	---	---
31	---	---	---	9.0	8.0	8.5	---	---	---	---	---	---
MONTH	6.0	2.0	3.5	10.5	2.5	6.5	15.5	8.0	12.5	22.0	13.5	18.0

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	---	---	---	26.0	25.0	25.5						
2	---	---	---	27.0	25.0	26.0						
3	---	---	---	26.5	25.5	26.0						
4	---	---	---	27.0	26.0	26.5						
5	---	---	---	27.5	26.0	26.5						
6	---	---	---	27.0	26.0	26.5						
7	---	---	---	26.5	25.5	26.0						
8	---	---	---	26.5	25.5	26.0						
9	---	---	---	27.0	25.5	26.0						
10	---	---	---	26.5	26.0	26.0						
11	22.5	21.5	---	---	---	---						
12	22.5	21.5	22.0	---	---	---						
13	23.0	21.5	22.5	---	---	---						
14	23.5	22.0	22.5	---	---	---						
15	23.5	22.5	23.0	---	---	---						
16	23.0	22.5	23.0	---	---	---						
17	23.5	22.0	23.0	---	---	---						
18	23.5	22.5	22.5	---	---	---						
19	23.5	22.5	23.0	---	---	---						
20	23.0	22.5	22.5	---	---	---						
21	23.0	22.0	22.5	---	---	---						
22	24.0	22.0	23.0	---	---	---						
23	24.5	23.0	23.5	---	---	---						
24	25.0	23.5	24.0	---	---	---						
25	25.5	24.0	24.5	---	---	---						
26	25.5	24.0	25.0	---	---	---						
27	26.0	24.5	25.5	---	---	---						
28	26.0	25.0	25.5	---	---	---						
29	26.5	25.0	25.5	---	---	---						
30	26.0	25.0	25.5	---	---	---						
31	---	---	---	---	---	---						
MONTH	26.5	21.5	23.5	27.5	25.0	26.0						

01477050 DELAWARE RIVER AT CHESTER, PA--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	316	282	297	311	257	270	247	227	234	---	---	---
2	323	282	304	286	258	273	241	226	232	---	---	---
3	330	277	294	280	256	268	241	218	228	---	---	---
4	288	270	277	282	256	268	244	208	225	---	---	---
5	---	---	---	287	266	275	247	204	219	---	---	---
6	---	---	---	297	271	280	234	204	216	---	---	---
7	---	---	---	290	261	275	237	201	212	---	---	---
8	---	---	---	288	260	270	281	195	218	---	---	---
9	237	229	---	280	257	268	229	194	202	---	---	---
10	240	213	226	284	256	267	230	198	207	---	---	---
11	230	206	216	282	250	262	239	199	212	---	---	---
12	235	196	207	266	245	255	237	207	216	---	---	---
13	215	187	195	270	247	258	233	209	218	---	---	---
14	198	181	187	264	249	255	236	200	219	---	---	---
15	208	180	189	263	245	252	233	212	222	---	---	---
16	221	184	196	260	243	253	237	217	228	---	---	---
17	225	190	204	268	240	250	254	221	235	---	---	---
18	228	194	208	257	238	247	259	228	240	---	---	---
19	227	199	211	255	235	246	254	210	242	---	---	---
20	232	203	215	255	238	245	260	234	246	---	---	---
21	237	206	221	262	241	248	265	237	252	---	---	---
22	243	213	227	263	243	251	275	247	261	---	---	---
23	246	217	228	261	245	253	286	255	267	---	---	---
24	254	221	231	268	248	255	281	258	270	---	---	---
25	250	222	233	264	251	257	283	262	272	---	---	---
26	245	225	236	270	195	250	284	267	275	---	---	---
27	252	230	241	270	191	248	296	272	283	---	---	---
28	265	232	248	288	261	274	302	283	290	309	297	---
29	265	246	254	265	211	250	---	---	---	311	298	303
30	267	246	256	244	228	236	---	---	---	313	298	302
31	272	252	260	---	---	---	---	---	---	315	297	304
MONTH	330	180	233	311	191	259	302	194	237	315	297	303

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	316	299	305	579	441	504	209	174	186	241	212	225
2	313	300	306	662	440	521	210	184	197	237	209	219
3	316	301	308	726	460	559	213	187	198	229	213	219
4	317	303	309	934	482	644	206	184	194	231	210	220
5	322	307	313	831	484	615	217	182	193	231	214	221
6	322	309	---	689	473	573	206	182	192	230	213	221
7	---	---	---	731	471	569	204	181	191	223	209	217
8	---	---	---	735	472	584	204	181	191	225	206	214
9	---	---	---	682	470	568	259	188	202	248	206	216
10	---	---	---	685	474	573	209	185	196	254	205	220
11	390	331	---	750	454	549	212	195	203	241	207	215
12	386	330	353	559	436	494	212	187	197	226	206	214
13	413	333	365	574	428	487	209	186	195	240	197	211
14	424	342	375	730	421	515	210	181	193	232	204	216
15	453	348	385	516	417	450	214	187	195	238	205	220
16	954	358	468	531	400	455	201	181	191	234	209	223
17	582	375	447	510	412	459	198	172	185	238	216	224
18	633	379	460	510	383	423	211	173	184	241	212	224
19	575	383	461	480	384	418	197	173	183	237	208	223
20	666	396	496	449	353	393	217	173	186	234	213	223
21	805	422	566	396	241	347	200	179	190	249	216	227
22	831	425	586	315	241	278	210	181	191	235	217	226
23	921	432	610	283	214	243	209	182	193	248	224	234
24	757	444	581	230	180	204	206	186	195	239	225	231
25	749	444	574	205	166	185	210	189	198	236	221	229
26	744	448	560	191	153	171	213	191	199	237	217	225
27	942	458	600	189	152	167	215	191	202	---	---	---
28	650	452	549	183	150	168	222	194	207	---	---	---
29	639	450	527	191	155	173	222	193	208	---	---	---
30	---	---	---	194	167	180	250	208	229	---	---	---
31	---	---	---	202	168	185	---	---	---	---	---	---
MONTH	954	299	457	934	150	408	259	172	195	254	197	221

01477050 DELAWARE RIVER AT CHESTER, PA--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	---	---	---	477	319	379						
2	---	---	---	444	319	377						
3	---	---	---	434	310	371						
4	---	---	---	431	324	377						
5	---	---	---	454	331	387						
6	---	---	---	456	334	382						
7	---	---	---	435	327	371						
8	---	---	---	470	321	384						
9	---	---	---	507	332	396						
10	---	---	---	590	355	423						
11	289	256	---	---	---	---						
12	288	253	270	---	---	---						
13	321	250	267	---	---	---						
14	315	258	274	---	---	---						
15	289	256	274	---	---	---						
16	282	257	268	---	---	---						
17	290	260	275	---	---	---						
18	310	277	291	---	---	---						
19	326	277	302	---	---	---						
20	330	286	306	---	---	---						
21	335	282	304	---	---	---						
22	331	283	308	---	---	---						
23	341	283	313	---	---	---						
24	348	297	320	---	---	---						
25	367	299	331	---	---	---						
26	369	306	338	---	---	---						
27	405	303	351	---	---	---						
28	398	315	357	---	---	---						
29	470	317	373	---	---	---						
30	480	318	367	---	---	---						
31	---	---	---	---	---	---						
MONTH	480	250	310	590	310	385						

OXYGEN, DISSOLVED (DO), MG/L, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	5.2	3.4	4.3	4.4	4.0	4.2	7.4	6.5	7.0	---	---	---
2	4.9	3.1	3.9	4.7	3.9	4.2	7.7	6.8	7.0	---	---	---
3	5.0	2.9	4.0	5.3	4.2	4.6	7.6	6.9	7.2	---	---	---
4	5.1	3.7	4.5	4.6	4.1	4.3	8.0	7.2	7.5	---	---	---
5	---	---	---	4.4	4.1	4.2	7.8	7.4	7.6	---	---	---
6	---	---	---	4.4	3.9	4.1	7.6	7.3	7.5	---	---	---
7	---	---	---	4.4	3.8	4.0	7.9	7.2	7.4	---	---	---
8	---	---	---	5.1	3.9	4.2	8.5	7.3	7.8	---	---	---
9	6.0	5.5	---	4.8	4.3	4.5	8.6	7.9	8.2	---	---	---
10	6.9	5.9	6.3	5.2	4.4	4.7	8.7	8.1	8.3	---	---	---
11	6.9	6.1	6.6	5.4	4.5	4.8	8.3	8.0	8.1	---	---	---
12	6.8	6.2	6.5	5.9	4.7	5.1	8.5	7.8	8.0	---	---	---
13	6.5	6.0	6.2	5.8	5.1	5.3	8.2	7.7	7.9	---	---	---
14	6.8	6.0	6.3	5.7	5.2	5.4	8.5	7.8	8.0	---	---	---
15	6.7	6.1	6.3	6.3	5.5	5.8	8.3	7.8	7.9	---	---	---
16	6.4	5.9	6.1	6.6	6.0	6.3	8.0	7.7	7.8	---	---	---
17	6.0	5.6	5.8	6.9	6.1	6.5	9.0	7.7	8.2	---	---	---
18	5.7	5.3	5.5	6.7	6.2	6.4	9.1	8.0	8.5	---	---	---
19	5.6	5.0	5.2	6.3	5.9	6.1	9.2	8.2	8.6	---	---	---
20	5.1	4.7	4.9	6.3	5.6	5.8	9.5	8.5	8.9	---	---	---
21	5.0	4.3	4.6	6.0	5.3	5.5	9.6	8.9	9.0	---	---	---
22	4.6	3.8	4.3	5.6	5.2	5.3	9.1	8.7	8.9	---	---	---
23	4.4	3.8	4.1	5.6	4.9	5.1	9.1	8.4	8.6	---	---	---
24	4.7	4.1	4.4	5.4	4.7	4.9	8.5	8.2	8.3	---	---	---
25	4.8	4.4	4.6	5.0	4.6	4.8	8.7	8.2	8.5	---	---	---
26	5.1	4.6	4.8	7.0	4.7	5.6	8.6	8.3	8.4	---	---	---
27	5.0	4.5	4.8	7.1	5.6	6.0	9.1	8.2	8.6	---	---	---
28	5.0	4.4	4.8	6.5	5.6	5.9	9.6	8.5	9.0	7.3	6.1	---
29	4.7	4.2	4.5	6.2	5.6	5.9	---	---	---	6.7	6.0	6.3
30	4.7	4.0	4.4	7.3	6.0	6.6	---	---	---	7.2	6.1	6.6
31	4.5	4.0	4.3	---	---	---	---	---	---	7.4	6.3	6.7
MONTH	6.9	2.9	5.1	7.3	3.8	5.2	9.6	6.5	8.1	7.4	6.0	6.5

01477050 DELAWARE RIVER AT CHESTER, PA--Continued

OXYGEN, DISSOLVED (DO), MG/L, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	7.8	6.5	7.1	---	---	---	10.0	8.5	9.4	---	---	---
2	8.2	7.2	7.7	---	---	---	9.4	8.1	8.9	---	---	---
3	8.5	7.6	8.0	---	---	---	9.0	8.1	---	---	---	---
4	8.5	7.9	8.2	---	---	---	---	---	---	---	---	---
5	8.4	7.9	8.2	---	---	---	---	---	---	---	---	---
6	8.2	7.9	---	---	---	---	---	---	---	---	---	---
7	---	---	---	---	---	---	---	---	---	---	---	---
8	---	---	---	---	---	---	---	---	---	---	---	---
9	---	---	---	---	---	---	---	---	---	---	---	---
10	---	---	---	---	---	---	---	---	---	---	---	---
11	8.5	7.9	---	---	---	---	---	---	---	---	---	---
12	8.5	7.7	7.9	---	---	---	---	---	---	---	---	---
13	8.2	7.5	7.8	---	---	---	---	---	---	---	---	---
14	7.9	7.2	7.6	---	---	---	---	---	---	6.2	5.7	---
15	7.5	6.7	7.0	---	---	---	8.5	7.1	---	6.3	5.8	6.1
16	7.6	6.3	6.9	---	---	---	7.3	6.8	7.1	6.3	5.9	6.1
17	7.1	6.6	6.8	---	---	---	8.9	7.2	8.1	6.2	5.4	5.9
18	7.2	5.5	6.8	---	---	---	8.9	7.9	8.3	6.0	5.7	5.9
19	7.1	6.4	6.8	---	---	---	9.1	7.7	8.3	6.1	5.3	5.7
20	6.8	6.0	6.4	---	---	---	8.6	7.4	8.2	6.0	5.7	5.8
21	6.8	5.5	6.1	---	---	---	8.8	7.6	8.1	6.4	5.9	6.0
22	6.6	5.5	6.0	---	---	---	---	---	---	6.6	5.9	6.2
23	6.4	5.4	5.8	---	---	---	---	---	---	6.8	6.1	6.3
24	5.9	4.9	5.3	---	---	---	---	---	---	6.5	5.7	6.1
25	5.5	4.3	4.9	---	---	---	---	---	---	6.7	5.8	6.1
26	5.4	4.2	5.0	---	---	---	---	---	---	6.6	6.2	6.3
27	6.3	4.8	5.6	---	---	---	---	---	---	---	---	---
28	6.5	5.6	5.8	---	---	---	---	---	---	---	---	---
29	6.1	5.4	5.7	10.7	9.0	---	---	---	---	---	---	---
30	---	---	---	10.6	9.4	10.1	---	---	---	---	---	---
31	---	---	---	10.1	8.9	9.5	---	---	---	---	---	---
MONTH	8.5	4.2	6.7	10.7	8.9	9.8	10.0	6.8	8.3	6.8	5.3	6.0

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	---	---	---	3.7	3.3	3.5						
2	---	---	---	3.6	3.3	3.4						
3	---	---	---	3.5	3.2	3.3						
4	---	---	---	3.6	3.2	3.3						
5	---	---	---	3.7	3.3	3.4						
6	---	---	---	3.9	3.3	3.6						
7	---	---	---	4.1	3.7	3.9						
8	---	---	---	4.2	3.4	3.7						
9	---	---	---	3.7	3.3	3.5						
10	---	---	---	3.5	3.4	3.4						
11	4.9	4.0	---	---	---	---						
12	5.1	4.7	4.9	---	---	---						
13	5.1	4.6	4.9	---	---	---						
14	5.1	4.6	4.9	---	---	---						
15	4.9	4.6	4.8	---	---	---						
16	4.8	4.5	4.7	---	---	---						
17	4.8	4.3	4.6	---	---	---						
18	4.6	4.3	4.5	---	---	---						
19	4.6	4.3	4.5	---	---	---						
20	4.6	4.3	4.5	---	---	---						
21	4.8	4.4	4.6	---	---	---						
22	4.9	4.5	4.6	---	---	---						
23	4.8	4.4	4.5	---	---	---						
24	4.5	4.3	4.4	---	---	---						
25	4.4	4.1	4.3	---	---	---						
26	4.3	3.8	4.0	---	---	---						
27	4.1	3.7	3.9	---	---	---						
28	3.9	3.6	3.8	---	---	---						
29	3.8	3.5	3.7	---	---	---						
30	3.7	3.4	3.5	---	---	---						
31	---	---	---	---	---	---						
MONTH	5.1	3.4	4.4	4.2	3.2	3.5						

01477050 DELAWARE RIVER AT CHESTER, PA--Continued

PH (STANDARD UNITS), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	6.8	6.7	6.8	6.6	6.4	6.5	6.9	6.7	6.8	---	---	---
2	6.9	6.8	6.8	6.6	6.5	6.5	6.9	6.8	6.8	---	---	---
3	6.9	6.5	6.7	6.7	6.5	6.6	6.9	6.7	6.8	---	---	---
4	6.7	6.6	6.6	6.7	6.5	6.5	7.0	6.8	6.9	---	---	---
5	---	---	---	6.7	6.5	6.6	6.9	6.8	6.9	---	---	---
6	---	---	---	6.7	6.5	6.6	6.9	6.8	6.8	---	---	---
7	---	---	---	6.6	6.6	6.6	6.9	6.8	6.8	---	---	---
8	---	---	---	6.7	6.5	6.6	6.9	6.8	6.8	---	---	---
9	6.8	6.6	---	6.7	6.6	6.6	6.8	6.7	6.7	---	---	---
10	6.9	6.7	6.8	6.7	6.7	6.7	6.9	6.7	6.8	---	---	---
11	6.8	6.7	6.7	6.8	6.6	6.7	6.8	6.7	6.8	---	---	---
12	6.7	6.4	6.6	6.7	6.6	6.7	6.8	6.7	6.8	---	---	---
13	6.7	6.6	6.6	6.7	6.6	6.6	6.8	6.7	6.8	---	---	---
14	6.7	6.6	6.6	6.7	6.6	6.7	6.9	6.7	6.8	---	---	---
15	6.7	6.5	6.6	6.7	6.6	6.7	6.8	6.4	6.7	---	---	---
16	8.7	6.6	6.8	6.8	6.7	6.7	6.8	6.7	6.7	---	---	---
17	7.4	6.6	6.7	6.8	6.6	6.7	6.9	6.7	6.7	---	---	---
18	6.6	6.6	6.6	6.8	6.7	6.8	6.8	6.6	6.7	---	---	---
19	6.6	6.5	6.6	6.8	6.7	6.7	6.8	6.7	6.7	---	---	---
20	6.6	6.5	6.5	6.8	6.7	6.7	6.8	6.7	6.8	---	---	---
21	6.5	6.5	6.5	6.7	6.6	6.7	6.9	6.8	6.8	---	---	---
22	6.5	6.5	6.5	6.7	6.6	6.7	6.9	6.8	6.9	---	---	---
23	6.5	6.5	6.5	6.7	6.6	6.6	6.9	6.8	6.9	---	---	---
24	6.5	6.4	6.5	6.7	6.6	6.6	6.9	6.8	6.9	---	---	---
25	6.5	6.4	6.5	6.6	6.6	6.6	6.9	6.8	6.9	---	---	---
26	6.6	6.4	6.5	6.8	6.6	6.7	6.9	6.8	6.8	---	---	---
27	6.6	6.5	6.5	6.8	6.6	6.7	6.9	6.7	6.8	---	---	---
28	6.6	6.5	6.5	6.8	6.6	6.7	7.0	6.8	6.9	6.8	6.7	---
29	6.6	6.5	6.5	6.7	6.6	6.7	---	---	---	7.0	6.7	6.8
30	6.6	6.5	6.5	6.9	6.6	6.8	---	---	---	7.0	6.7	6.8
31	6.6	6.4	6.5	---	---	---	---	---	---	6.9	6.7	6.8
MONTH	8.7	6.4	6.6	6.9	6.4	6.7	7.0	6.4	6.8	7.0	6.7	6.8

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	6.9	6.8	6.8	6.9	6.8	6.9	6.3	6.1	6.1	---	---	---
2	7.0	6.8	6.9	6.9	6.8	6.9	6.3	6.1	6.2	---	---	---
3	7.1	6.8	6.9	7.1	6.5	6.9	6.2	6.1	---	---	---	---
4	7.1	6.9	7.0	7.2	6.9	7.1	---	---	---	---	---	---
5	7.2	6.9	7.0	7.2	7.1	7.1	---	---	---	---	---	---
6	7.0	7.0	---	7.2	7.1	7.2	---	---	---	---	---	---
7	---	---	---	7.2	7.0	7.1	---	---	---	---	---	---
8	---	---	---	7.1	6.5	6.8	---	---	---	---	---	---
9	---	---	---	6.9	6.6	6.7	---	---	---	---	---	---
10	---	---	---	6.8	6.5	6.7	---	---	---	6.7	6.6	---
11	7.1	6.8	---	6.9	6.6	6.7	---	---	---	6.7	6.6	6.6
12	7.1	6.9	7.0	6.6	6.5	6.6	---	---	---	6.7	6.4	6.6
13	7.1	6.9	7.0	6.8	6.5	6.6	---	---	---	6.7	6.4	6.6
14	7.1	6.9	7.0	6.8	6.6	6.7	---	---	---	6.8	6.5	6.7
15	7.1	6.8	6.9	6.7	6.6	6.7	---	---	---	6.8	6.7	6.7
16	7.1	6.8	6.9	6.7	6.2	6.4	---	---	---	6.8	6.7	6.7
17	7.0	6.8	6.9	6.8	6.3	6.6	---	---	---	6.8	6.6	6.7
18	7.1	6.7	6.9	6.7	6.5	6.6	---	---	---	6.8	6.8	6.8
19	7.1	6.7	6.9	6.8	6.5	6.6	---	---	---	6.8	6.7	6.8
20	7.0	6.7	6.9	6.7	6.5	6.6	---	---	---	6.8	6.6	6.7
21	7.0	6.8	6.9	6.7	6.5	6.6	---	---	---	6.8	6.7	6.7
22	7.0	6.9	6.9	6.7	6.5	6.6	---	---	---	6.8	6.4	6.6
23	7.0	6.9	7.0	6.8	6.6	6.7	---	---	---	6.8	6.4	6.5
24	6.9	6.8	6.9	6.7	6.4	6.6	---	---	---	6.8	6.4	6.7
25	6.8	6.7	6.8	6.6	6.4	6.5	---	---	---	6.8	6.5	6.7
26	6.8	6.7	6.8	6.5	6.4	6.4	---	---	---	6.8	6.7	6.7
27	6.9	6.7	6.8	6.5	6.3	6.4	---	---	---	---	---	---
28	6.9	6.7	6.8	6.4	6.3	6.3	---	---	---	---	---	---
29	6.9	6.7	6.8	6.4	5.9	6.1	---	---	---	---	---	---
30	---	---	---	6.1	5.9	6.0	---	---	---	---	---	---
31	---	---	---	6.2	6.0	6.1	---	---	---	---	---	---
MONTH	7.2	6.7	6.9	7.2	5.9	6.6	6.3	6.1	6.2	6.8	6.4	6.7

01477050 DELAWARE RIVER AT CHESTER, PA--Continued

PH (STANDARD UNITS), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	---	---	---	6.6	6.5	6.6						
2	---	---	---	6.7	6.6	6.6						
3	---	---	---	6.6	6.6	6.6						
4	---	---	---	6.6	6.5	6.6						
5	---	---	---	6.6	6.5	6.5						
6	---	---	---	6.6	6.5	6.5						
7	---	---	---	8.0	6.4	6.7						
8	---	---	---	6.7	6.4	6.6						
9	---	---	---	6.7	6.6	6.6						
10	---	---	---	6.7	6.6	6.6						
11	7.1	6.7	---	---	---	---						
12	6.7	6.6	6.7	---	---	---						
13	6.7	6.6	6.6	---	---	---						
14	6.7	6.6	6.6	---	---	---						
15	6.6	6.6	6.6	---	---	---						
16	6.6	6.5	6.6	---	---	---						
17	6.7	6.5	6.6	---	---	---						
18	6.6	6.6	6.6	---	---	---						
19	6.6	6.6	6.6	---	---	---						
20	6.6	6.6	6.6	---	---	---						
21	6.6	6.5	6.6	---	---	---						
22	6.6	6.5	6.6	---	---	---						
23	6.6	6.5	6.6	---	---	---						
24	6.6	6.5	6.6	---	---	---						
25	6.6	6.5	6.5	---	---	---						
26	6.6	6.5	6.5	---	---	---						
27	6.5	6.5	6.5	---	---	---						
28	6.5	6.5	6.5	---	---	---						
29	6.5	6.5	6.5	---	---	---						
30	6.6	6.5	6.5	---	---	---						
31	---	---	---	---	---	---						
MONTH	7.1	6.5	6.6	8.0	6.4	6.6						

01477100 RACCOON CREEK NEAR MULLICA HILL, NJ

LOCATION.--Lat 39°42'31", long 75°12'05", Gloucester County, Hydrologic Unit 02040202, at bridge on Cedar Grove-Richwood Grove Road, 0.6 mi (1.0 km) upstream from Miery Run, 1.0 mi (1.6 km) downstream from outflow of Ewan Lake, 2.5 mi (4.0 km) southeast of Mullica Hill, and 4.0 mi (6.4 km) southwest of Pitman.

DRAINAGE AREA.--10.1 mi² (26.2 km²).

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1953-63, 1975 to current year.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH FIELD (UNITS)	TEMPERATURE, WATER (DEG C)	OXYGEN, DISSOLVED (MG/L)	OXYGEN DEMAND, BIOCHEM UNINHIB 5 DAY (MG/L)	COLIFORM, FECAL, EC BROTH (MPN)	STREPTOCOCCI FECAL (MPN)	HARDNESS (MG/L AS CACO3)	CALCIUM DISSOLVED (MG/L AS CA)
FEB 07...	1030	147	7.0	3.0	13.6	1.2	14	49	51	14
APR 09...	0900	128	6.8	13.5	9.4	1.3	130	110	41	11
JUN 03...	0930	137	6.9	23.0	7.4	1.1	33	79	43	11
JUL 31...	1230	145	7.1	26.0	7.1	1.0	40	920	52	14
AUG 21...	1310	143	7.4	22.5	7.7	1.2	330	230	49	13

DATE	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)
FEB 07...	4.0	3.4	2.7	11	0	9	30	10	.1
APR 09...	3.4	2.9	2.8	11	0	9	26	8.3	.1
JUN 03...	3.8	3.4	2.7	20	0	16	25	9.2	.1
JUL 31...	4.2	3.2	3.5	24	0	20	22	10	.1
AUG 21...	4.1	3.3	3.4	51	0	42	22	9.8	.2

DATE	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, ORTHOPHOSPHATE TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
FEB 07...	7.2	92	E3.0	.040	.23	.27	--	<.01	6.9
APR 09...	5.4	82	2.1	.260	.24	.50	2.6	.16	4.5
JUN 03...	5.8	106	1.8	.140	.21	.35	2.2	.53	4.8
JUL 31...	5.0	90	.82	.160	.42	.58	1.4	.12	3.7
AUG 21...	5.4	90	.88	.030	.56	.59	1.5	.09	1.5

01477120 RACCOON CREEK NEAR SWEDESBORO, NJ

LOCATION.--Lat 39°44'28", long 75°15'33", Gloucester County, Hydrologic Unit 02040202, on right bank 25 ft (8 m) downstream from county bridge No. 5-F-3 on Harrisonville-Gibbstown Road, 1.8 mi (2.9 km) west of Mullica Hill, and 2.8 mi (4.5 km) east of Swedesboro.

DRAINAGE AREA.--29.9 mi^2 (77.4 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1966 to current year.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929. Prior to July 28, 1969, at datum 7.96 ft (2.426 m) higher. July 28, 1969 to Sept. 30, 1969, at datum 5.96 ft (1.817 m) higher.

REMARKS.--Water-discharge records fair except those from Oct. 1-30 and those for period of no gage-height record, Oct. 30 to Dec. 6, which are poor.

AVERAGE DISCHARGE.--14 years, 43.4 ft^3/s (1.229 m^3/s), 19.71 in/yr (501 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,530 ft^3/s (100 m^3/s) Aug. 10, 1967, elevation, 17.44 ft (5.316 m) present datum; minimum daily, 2.9 ft^3/s (0.082 m^3/s) July 14, Aug. 27, 28, Sept. 10, 1966.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 268 ft^3/s (7.59 m^3/s) Oct. 10, elevation, 10.16 ft (3.097 m), no peak above base of 300 ft^3/s (8.50 m^3/s); minimum, 11 ft^3/s (0.31 m^3/s) Aug. 27-29, Sept. 3-5, 13, 14.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	116	32	36	32	32	26	176	118	23	23	84	13
2	118	47	34	31	31	25	74	66	22	19	39	13
3	89	87	33	30	30	26	54	50	23	20	22	12
4	78	66	33	29	30	27	94	43	24	23	24	11
5	50	48	35	29	30	28	84	35	22	18	19	12
6	60	40	52	28	30	31	54	31	21	17	22	12
7	47	40	47	29	30	30	49	29	22	16	17	12
8	42	39	39	30	31	32	49	39	31	16	16	12
9	40	38	34	32	31	34	88	40	24	17	16	12
10	157	43	32	34	31	30	137	36	30	17	15	12
11	140	61	31	47	29	33	70	40	26	17	17	12
12	71	100	30	133	30	29	56	34	23	16	23	12
13	71	70	38	57	29	39	54	35	21	15	17	12
14	58	55	50	43	29	119	49	34	21	15	16	12
15	48	47	43	39	30	59	59	31	21	14	15	13
16	44	43	35	37	36	40	48	30	36	13	16	12
17	42	38	34	36	36	37	42	29	26	15	14	13
18	41	40	32	39	31	41	41	41	22	15	14	28
19	40	42	34	70	30	36	40	42	21	14	15	17
20	39	44	35	45	31	33	39	39	20	13	15	15
21	40	42	34	39	31	100	38	47	19	13	14	15
22	39	41	36	40	38	105	36	40	18	20	14	13
23	38	41	37	51	50	49	35	33	18	42	14	13
24	41	40	36	40	32	42	35	30	17	21	13	13
25	39	40	46	37	29	138	36	29	17	16	13	12
26	38	56	40	36	28	66	35	26	17	15	13	12
27	36	82	35	35	28	47	46	25	17	15	12	12
28	37	52	33	35	28	42	74	24	17	14	12	11
29	38	45	33	35	27	74	110	24	30	43	12	11
30	36	39	32	33	---	81	69	23	67	20	12	11
31	34	---	32	32	---	130	---	24	---	16	12	---
TOTAL	1807	1498	1131	1263	908	1629	1871	1167	716	568	577	390
MEAN	58.3	49.9	36.5	40.7	31.3	52.5	62.4	37.6	23.9	18.3	18.6	13.0
MAX	157	100	52	133	50	138	176	118	67	43	84	28
MIN	34	32	30	28	27	25	35	23	17	13	12	11
CFSM	1.95	1.67	1.22	1.36	1.05	1.76	2.09	1.26	.80	.61	.62	.44
IN.	2.25	1.86	1.41	1.57	1.13	2.03	2.33	1.45	.89	.71	.72	.49

CAL YR 1979 TOTAL 22109 MEAN 60.6 MAX 900 MIN 22 CFSM 2.03 IN 27.51
WTR YR 1980 TOTAL 13525 MEAN 37.0 MAX 176 MIN 11 CFSM 1.24 IN 16.83

01477120 RACCOON CREEK NEAR SWEDESBORO, NJ--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1965 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: May 1966 to September 1973.
SUSPENDED-SEDIMENT DISCHARGE: June 1966 to September 1969.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method, and selected water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIOCHEM UNINHIB 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)	HARD-NESS (MG/L AS CACO3)
OCT 18...	0900	41	158	7.2	12.0	9.8	1.1	50	490	58
FEB 13...	1100	30	180	7.1	1.5	13.4	.5	270	2	68
APR 09...	1100	80	130	6.9	14.0	9.5	1.8	1600	>2400	44
JUN 03...	1200	22	166	7.3	22.0	7.9	1.0	240	1700	57
JUL 16...	1100	14	178	7.2	23.5	8.3	1.0	170	200	63
AUG 25...	1210	13	193	7.7	21.5	8.9	.7	3500	200	76

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)
OCT 18...	17	3.7	3.9	3.4	27	0	22	--	28	11
FEB 13...	21	3.7	5.0	3.1	30	0	25	--	28	12
APR 09...	13	2.9	3.8	2.7	21	0	17	--	25	8.5
JUN 03...	17	3.5	5.8	3.0	38	0	31	.0	26	12
JUL 16...	19	3.7	4.2	3.6	39	0	32	--	22	11
AUG 25...	23	4.6	3.9	4.0	49	0	40	--	22	12

DATE	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, ORTHOPH OSPHATE TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT 18...	.2	10	109	1.9	.200	1.1	1.3	3.2	.09	4.8
FEB 13...	.2	10	104	2.3	.030	.39	.42	2.7	.32	1.0
APR 09...	.2	7.2	93	1.5	.160	.56	.72	2.2	1.4	7.8
JUN 03...	.2	10	118	1.6	.260	.03	.29	1.9	.38	4.1
JUL 16...	.2	10	121	1.2	.060	.43	.49	1.7	.21	2.8
AUG 25...	.3	12	108	1.3	.120	.38	.50	1.8	.40	5.1

DATE	TIME	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE)	BORON, TOTAL RECOV-ERABLE (UG/L AS B)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)
JUN 03...	1200	0	2	0	50	0	<10	1

01477120 RACCOON CREEK NEAR SWEDESBORO, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	PHENOLS (UG/L)
JUN								
03...	1700	3	40	<.1	2	0	10	1

01477510 OLDMANS CREEK AT PORCHES MILL, NJ

LOCATION.--Lat 39°41'57", long 75°20'01", Salem County, Hydrologic Unit 02040206, at bridge on Kings Highway in Porches Mill, 150 ft (46 m) downstream of tributary from outflow of lake at Porches Mill, 1.0 mi (1.6 km) north of Seven Stars, and 2.1 mi (3.3 km) southeast of Auburn.

DRAINAGE AREA.--21.0 mi² (54.4 km²).

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1975 to current year.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPERATURE, WATER (DEG C)	OXYGEN, DISSOLVED (MG/L)	OXYGEN DEMAND, BIOCHEM UNINHIB 5 DAY (MG/L)	COLIFORM, FECAL, EC BROTH (MPN)	STREPTOCOCCI FECAL (MPN)	HARDNESS (MG/L AS CACO3)
OCT 18...	1130	33	187	7.1	13.5	9.8	1.0	33	80	70
FEB 14...	1200	10	200	7.1	3.0	12.8	.5	49	79	76
APR 17...	0900	34	162	7.2	10.0	11.6	--	79	33	64
JUN 10...	0900	17	166	6.8	16.5	7.6	1.9	350	1600	63
AUG 25...	1040	2.5	205	7.6	21.5	8.4	1.4	460	240	68
SEP 24...	1220	1.5	215	7.7	21.5	8.5	1.5	540	920	81

DATE	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)
OCT 18...	20	4.8	3.8	3.8	29	0	24	.0	30	16
FEB 14...	22	5.1	4.3	3.1	29	0	24	--	33	14
APR 17...	18	4.6	3.5	3.0	22	0	18	--	28	11
JUN 10...	18	4.3	3.6	2.9	34	0	28	.5	22	13
AUG 25...	21	3.7	5.6	3.8	51	0	42	--	22	14
SEP 24...	25	4.4	3.9	4.0	54	0	44	.0	25	15

DATE	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, ORTHOPHOSPHATE TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT 18...	.2	12	133	2.7	.200	.40	.60	3.3	.06	4.8
FEB 14...	.2	11	123	E3.6	.240	.03	.27	--	.18	1.6
APR 17...	.2	8.6	109	2.5	.120	.31	.43	2.9	.12	2.7
JUN 10...	.2	8.4	122	1.8	.150	.68	.83	2.6	.22	5.5
AUG 25...	.3	14	122	1.4	.110	.59	.70	2.1	.28	3.3
SEP 24...	.3	15	136	1.3	.110	.55	.66	2.0	.28	3.7

01477510 OLDMANS CREEK AT PORCHES MILL, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE)	BORON, TOTAL RECOV-ERABLE (UG/L AS B)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)
OCT								
18...	1130	40	1	0	20	0	20	2
JUN								
10...	0900	20	2	0	30	0	<10	2
SEP								
24...	1220	30	2	0	70	0	10	3

DATE	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	PHENOLS (UG/L)
OCT								
18...	950	4	40	.2	3	0	30	2
JUN								
10...	2700	3	120	<.1	8	0	30	0
SEP								
24...	1500	9	90	<.1	9	0	20	3

01482100 DELAWARE RIVER AT DELAWARE MEMORIAL BRIDGE, AT WILMINGTON, DE

LOCATION.--Lat 39°41'21", long 75°31'19", New Castle County, Hydrologic Unit 02040205, on pier of right tower of downstream bridge of dual bridges at Wilmington, 2.0 mi (3.2 km) downstream from Christina River and at channel mile 67.70 (107.64 km).

DRAINAGE AREA.--11,030 mi^2 (28,570 km^2).

TIDE ELEVATION DATA

PERIOD OF RECORD.--July 1967 to current year. Tidal volumes published from July 1967 to September 1973.

GAGE.--Water-stage recorder and water-quality monitor. Datum of gage is -10.00 ft (-3.048 m) National Geodetic Vertical Datum of 1929. Gage-height record converted to elevation above or below (-) National Geodetic Vertical Datum 1929 for publication.

EXTREMES FOR PERIOD OF RECORD.--Maximum, 7.45 ft (2.271 m) Dec. 2, 1974; minimum, -5.86 ft (-1.786 m) Apr. 4, 1975.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum elevation known, 8.4 ft (2.56 m) Nov. 23, 1950, furnished by Corps of Engineers, U.S. Army; minimum, -9.1 ft (-2.77 m) Dec. 31, 1962.

EXTREMES FOR CURRENT YEAR.--Maximum elevation recorded, 5.72 ft (1.743 m) Oct 5; minimum recorded, -4.26 ft (1.298 m) Dec 17.

Summaries of tide elevations during current year are as follows:

TIDE ELEVATIONS, IN FEET, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

		OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
Maximum	Elevation	5.72	5.51	5.18	--	--	--	--	--	--	4.98	4.80	4.44
high tide	Date	5	26	20	--	--	--	--	--	--	10	22,23	25
Minimum	Elevation	-2.85	-2.87	-4.26	--	--	--	--	--	--	-2.53	-2.58	-3.96
low tide	Date	9	29	17	--	--	--	--	--	--	24	28	27
Mean high tide		4.22	3.94	3.46	--	--	--	--	--	--	--	--	3.03
Mean water level		1.36	1.17	0.63	--	--	--	--	--	--	--	--	0.39
Mean low tide		-1.60	-1.69	-2.12	--	--	--	--	--	--	--	--	-2.38

NOTE.--Missing or doubtful record on Jan. 3 to June 19, July 1-8, July 31 to Aug. 14.

01482100 DELAWARE RIVER AT DELAWARE MEMORIAL BRIDGE, NEAR WILMINGTON, DE

LOCATION.--Lat 39°41'21", long 75°31'19", New Castle County, Hydrologic Unit 02040205, at tidal gaging station located on channel side of west tower of south bridge between Pigeon Point, DE, and Deepwater Point, NJ.

DRAINAGE AREA.--11,030 mi² (28,600 km²).

WATER-QUALITY DATA

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1963 to current year.
pH: January 1968 to current year.
WATER TEMPERATURES: October 1956 to current year.
DISSOLVED OXYGEN: November 1962 to current year.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 12,700 micromhos Nov. 13, 1966; minimum, 100 micromhos on many days.
pH: Maximum, 9.3 Nov. 10-11, 13, 1970; minimum, 4.2 Nov. 6, 1969.
WATER TEMPERATURES: Maximum, 31.0°C Aug. 9, 1968; minimum, freezing point on many days during winter months.
DISSOLVED OXYGEN: Maximum, 13.7 mg/L Feb. 8, 9, 1980; minimum, 0.0 mg/L on many days during summer months.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	20.5	20.0	20.5	13.5	13.0	13.0	10.5	10.0	10.5	5.0	4.5	5.0
2	22.0	20.0	20.5	14.0	13.0	13.5	10.0	9.5	10.0	5.0	4.5	5.0
3	23.5	20.5	21.5	14.0	13.0	13.5	9.5	8.5	9.0	5.0	4.5	4.5
4	21.0	20.0	20.5	13.5	13.0	13.5	9.0	8.0	8.5	4.5	4.0	4.0
5	20.5	20.0	20.0	13.5	13.0	13.0	8.5	8.0	8.5	4.0	3.5	3.5
6	20.0	19.5	20.0	13.5	12.5	13.0	8.5	8.0	8.0	3.5	3.0	3.5
7	20.5	18.0	19.0	13.0	12.5	13.0	8.5	8.0	8.5	3.5	3.0	3.0
8	18.0	17.5	18.0	13.0	12.0	12.5	8.5	7.5	8.0	3.5	3.0	3.0
9	17.5	17.0	17.5	13.0	12.5	12.5	8.0	7.0	7.5	3.0	3.0	3.0
10	17.0	16.0	16.5	13.0	12.5	13.0	8.0	7.0	7.5	3.0	2.5	3.0
11	16.0	15.0	15.5	13.0	12.5	13.0	8.0	7.0	7.5	3.5	2.5	3.0
12	15.5	15.0	15.5	13.0	12.5	12.5	8.0	7.0	7.5	3.5	3.0	3.5
13	15.0	15.0	15.0	12.5	12.0	12.5	8.0	7.5	7.5	3.5	2.5	3.0
14	---	---	---	12.5	12.0	12.0	8.0	7.0	7.5	3.5	2.5	3.0
15	---	---	---	12.0	11.0	11.5	7.5	6.5	7.0	5.0	3.0	4.0
16	---	---	---	11.5	11.0	11.5	7.5	6.5	7.0	5.0	3.5	4.0
17	---	---	---	11.0	10.5	11.0	7.5	5.5	6.5	4.5	4.0	4.5
18	14.5	14.0	14.5	11.0	10.5	11.0	6.0	5.0	6.0	5.0	4.0	4.5
19	15.0	14.0	14.5	11.0	10.5	10.5	6.0	5.0	5.5	5.0	4.5	4.5
20	15.5	14.0	15.0	11.0	10.5	11.0	5.0	4.0	4.5	5.0	4.5	4.5
21	15.5	14.5	15.0	11.0	10.5	11.0	4.5	4.0	4.5	5.0	4.0	4.5
22	16.0	15.0	15.5	11.0	10.5	11.0	5.0	4.0	4.5	5.0	4.0	4.5
23	16.0	15.0	15.5	11.5	11.0	11.0	5.0	4.5	4.5	5.0	4.0	4.5
24	16.0	15.0	15.5	11.5	11.0	11.5	5.0	4.5	5.0	4.5	3.5	4.0
25	15.0	14.5	15.0	12.0	11.5	11.5	5.5	5.0	5.0	4.0	3.5	4.0
26	14.5	14.0	14.5	12.5	11.5	12.0	5.5	5.0	5.5	4.0	3.5	4.0
27	14.0	13.5	14.0	12.5	12.0	12.5	5.5	5.0	5.5	4.0	3.0	3.5
28	14.0	13.5	13.5	12.5	12.0	12.5	5.5	5.0	5.0	4.0	3.0	3.5
29	13.5	13.0	13.5	12.0	11.0	11.5	5.5	5.0	5.0	4.0	2.5	3.5
30	13.5	13.0	13.0	11.5	10.5	11.0	5.5	4.5	5.0	3.5	2.0	3.0
31	13.5	13.0	13.0	---	---	---	5.0	4.5	5.0	3.0	1.5	2.5
MONTH	23.5	13.0	16.5	14.0	10.5	12.0	10.5	4.0	6.5	5.0	1.5	4.0

01482100 DELAWARE RIVER AT DELAWARE MEMORIAL BRIDGE, NEAR WILMINGTON, DE--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	FEBRUARY			MARCH			APRIL			MAY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	2.5	1.5	2.0	2.5	1.5	2.5	10.0	8.5	9.0	---	---	---
2	2.0	.5	1.5	2.0	1.0	1.5	10.5	9.0	9.5	---	---	---
3	1.5	.0	1.0	2.0	1.0	1.5	10.5	9.5	---	---	---	---
4	1.0	.0	.5	2.0	.5	1.5	10.0	9.5	---	---	---	---
5	1.0	.0	.5	2.5	1.5	2.0	10.5	9.5	10.0	---	---	---
6	1.0	.0	.5	3.5	1.5	2.5	11.0	10.0	10.5	---	---	---
7	1.0	.0	.5	3.5	2.0	2.5	11.5	10.5	11.0	---	---	---
8	1.0	.0	.5	3.5	2.5	---	12.0	11.0	11.5	---	---	---
9	1.0	.0	.5	---	---	---	12.5	11.5	12.0	---	---	---
10	1.0	.0	.5	---	---	---	---	---	---	---	---	---
11	1.0	.0	.5	---	---	---	---	---	---	---	---	---
12	1.5	.5	1.0	---	---	---	---	---	---	---	---	---
13	2.0	.5	1.0	---	---	---	---	---	---	18.0	17.5	18.0
14	2.0	1.0	1.5	---	---	---	---	---	---	18.0	17.5	18.0
15	2.0	1.0	1.5	---	---	---	---	---	---	18.5	18.0	18.0
16	2.0	1.5	1.5	---	---	---	---	---	---	18.5	18.0	18.5
17	2.0	1.0	1.5	---	---	---	---	---	---	19.0	18.5	18.5
18	2.0	1.0	1.5	---	---	---	---	---	---	19.0	18.5	18.5
19	2.0	1.0	1.5	---	---	---	---	---	---	19.5	18.5	19.0
20	2.5	1.5	2.0	---	---	---	---	---	---	19.5	19.0	19.0
21	3.0	1.5	2.5	---	---	---	---	---	---	19.5	19.0	19.0
22	3.0	2.0	2.5	---	---	---	---	---	---	20.0	19.0	19.5
23	3.5	2.5	3.0	---	---	---	---	---	---	20.5	19.5	20.0
24	4.0	3.0	3.5	10.0	9.5	9.5	15.5	15.0	---	21.0	20.0	20.5
25	4.0	3.0	3.5	10.0	9.5	9.5	15.5	15.0	15.5	21.5	20.5	21.0
26	4.0	3.0	3.5	9.5	8.5	9.0	15.5	15.0	15.0	21.0	20.5	21.0
27	3.5	2.5	3.0	9.5	8.0	9.0	15.0	14.5	15.0	21.0	20.5	20.5
28	3.5	2.5	3.0	9.5	8.0	9.0	15.0	14.0	14.5	21.0	20.5	20.5
29	3.0	2.0	3.0	9.0	8.0	9.0	---	---	---	21.0	20.5	21.0
30	---	---	---	9.5	8.5	9.0	---	---	---	21.5	20.5	21.0
31	---	---	---	9.0	8.5	9.0	---	---	---	21.5	21.0	21.5
MONTH	4.0	.0	1.5	10.0	.5	6.0	15.5	8.5	12.0	21.5	17.5	19.5

DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	22.5	21.5	22.0	26.0	25.0	25.5	---	---	---	28.5	27.5	28.0
2	23.0	22.0	22.5	26.0	25.0	25.5	---	---	---	28.5	28.0	28.0
3	23.0	22.5	23.0	26.5	26.0	26.0	---	---	---	28.5	28.0	28.5
4	23.0	22.5	23.0	27.0	26.0	26.0	---	---	---	28.5	28.0	28.0
5	23.0	22.5	22.5	27.0	26.0	26.5	---	---	---	28.5	27.0	28.0
6	23.0	22.5	22.5	27.0	26.5	26.5	---	---	---	28.5	28.0	28.0
7	23.5	22.5	22.5	26.5	26.0	26.5	---	---	---	28.0	27.5	28.0
8	23.5	23.0	23.0	26.5	26.0	26.0	---	---	---	28.0	27.0	27.5
9	23.0	22.0	22.5	26.5	26.0	26.0	---	---	---	27.5	27.0	27.0
10	22.0	21.5	22.0	27.0	26.0	26.5	---	---	---	27.0	26.5	27.0
11	22.0	21.5	21.5	27.5	26.5	26.5	---	---	---	26.5	26.0	26.5
12	22.0	21.5	22.0	27.0	26.5	27.0	---	---	---	26.5	26.0	26.5
13	23.0	21.5	22.0	27.5	26.5	27.0	29.5	29.5	29.5	26.5	26.0	26.0
14	23.0	22.0	22.5	28.0	26.5	27.0	29.5	29.0	29.5	26.5	26.0	26.0
15	23.0	22.5	22.5	27.5	27.0	27.0	29.5	29.0	29.0	26.5	25.5	26.0
16	23.0	22.5	22.5	28.0	27.0	27.5	29.0	28.5	28.5	26.0	25.0	25.5
17	23.0	22.0	22.5	28.5	27.5	27.5	28.5	27.5	28.0	25.5	25.0	25.0
18	23.0	22.5	22.5	28.5	27.5	28.0	28.0	27.0	27.5	25.5	25.0	25.5
19	23.0	22.0	22.5	29.0	28.0	28.5	27.5	26.5	27.0	25.5	25.0	25.0
20	23.0	22.5	22.5	29.5	28.5	28.5	27.5	26.5	27.0	25.0	24.5	25.0
21	23.0	22.0	22.5	29.5	29.0	29.0	27.0	26.0	26.5	25.5	24.5	25.0
22	23.5	22.5	23.0	29.5	29.0	29.5	26.5	26.0	26.0	26.0	25.0	25.5
23	23.5	23.0	23.5	29.5	29.0	29.0	26.5	26.0	26.0	26.0	25.0	25.5
24	24.0	23.5	23.5	29.0	28.5	28.5	27.0	26.0	26.5	25.0	24.5	25.0
25	24.5	24.0	24.0	29.0	28.5	28.5	27.5	26.0	26.5	24.5	24.0	24.5
26	25.0	24.0	24.5	29.5	28.5	29.0	27.5	26.0	27.0	24.5	24.0	24.0
27	25.0	24.5	25.0	29.5	28.5	29.0	27.5	26.5	27.0	23.5	23.0	23.0
28	25.5	25.0	25.0	28.5	28.5	---	28.0	27.0	27.5	23.0	22.5	22.5
29	25.5	25.0	25.5	---	---	---	27.5	27.0	27.5	23.0	22.0	22.5
30	25.5	25.0	25.5	---	---	---	28.0	27.0	27.5	22.5	22.0	22.0
31	---	---	---	---	---	---	28.0	27.5	27.5	---	---	---
MONTH	25.5	21.5	23.0	29.5	25.0	27.5	29.5	26.0	27.5	28.5	22.0	26.0
YEAR	29.5	.0	15.0									

01482100 DELAWARE RIVER AT DELAWARE MEMORIAL BRIDGE, NEAR WILMINGTON, DE--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	1580	390	755	1450	350	751	370	280	312	1070	300	568
2	1080	360	578	1490	350	805	360	260	298	1060	290	562
3	740	390	495	1600	350	733	400	210	295	1130	300	583
4	---	---	---	1600	370	754	430	250	315	1230	320	615
5	---	---	---	1570	390	720	460	210	307	1240	330	630
6	---	---	---	1390	370	670	390	240	302	1300	330	749
7	---	---	---	1160	400	632	340	220	265	1300	290	776
8	---	---	---	1090	330	560	330	210	248	750	280	470
9	---	---	---	1070	290	524	290	240	268	1020	300	588
10	---	---	---	740	270	467	290	240	266	1090	320	629
11	---	---	---	630	270	394	300	220	260	1250	330	774
12	280	150	203	590	260	401	270	200	233	830	300	461
13	270	150	190	660	300	441	280	200	233	600	210	388
14	---	---	---	470	320	375	310	190	225	830	300	510
15	---	---	---	990	330	447	340	170	227	1130	240	545
16	---	---	---	710	290	406	460	170	245	1650	250	698
17	---	---	---	1040	240	460	420	170	199	2290	270	910
18	370	230	262	890	230	424	740	180	299	2230	270	986
19	660	220	304	1150	240	569	1050	170	420	1920	250	766
20	650	210	325	1420	240	610	1250	180	544	1570	250	655
21	670	210	320	1390	240	648	1140	190	579	1690	250	705
22	760	210	381	1590	250	746	1480	190	637	1620	260	715
23	1320	260	547	1480	250	771	1500	210	711	1930	290	886
24	1010	280	535	1630	260	802	1530	220	791	1090	270	603
25	860	310	484	1670	270	877	1520	260	926	1110	300	632
26	800	310	487	2720	240	1140	1270	210	659	970	310	581
27	980	320	534	1280	250	599	990	210	512	1070	300	626
28	950	320	551	710	260	391	800	270	408	1140	330	667
29	1000	330	566	370	270	303	630	270	372	1250	320	633
30	1300	360	627	360	290	315	790	280	448	880	310	523
31	1260	350	646	---	---	---	1050	290	534	1260	330	644
MONTH	1580	150	463	2720	230	591	1530	170	398	2290	210	648

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	1040	320	564	4130	1510	2820	230	210	219	---	---	---
2	1240	330	585	4370	1650	3060	250	210	228	---	---	---
3	1400	330	711	4470	1820	3260	320	230	248	---	---	---
4	2520	360	1060	6200	2350	4070	270	230	249	---	---	---
5	2550	370	1290	6760	2810	4630	260	240	248	---	---	---
6	3230	540	1740	6910	2320	4450	350	240	270	---	---	---
7	4380	900	2370	6540	2720	4570	860	260	310	---	---	---
8	5030	1000	2770	7460	3250	---	300	260	280	---	---	---
9	5860	1170	3410	---	---	---	380	180	269	---	---	---
10	5950	1490	3450	---	---	---	230	170	184	---	---	---
11	6710	1570	4060	---	---	---	180	160	170	---	---	---
12	6360	1540	3870	---	---	---	260	170	178	---	---	---
13	6390	1800	3950	---	---	---	310	180	197	410	190	246
14	6290	1810	3870	---	---	---	580	170	195	590	180	253
15	6010	1650	3710	---	---	---	230	170	189	500	190	246
16	7340	2190	4320	---	---	---	190	170	176	560	190	276
17	6030	1830	3820	---	---	---	190	170	174	600	200	291
18	6230	1840	3900	---	---	---	210	160	179	700	210	350
19	6190	2000	3970	---	---	---	190	160	171	630	210	310
20	6260	2100	4190	---	---	---	190	160	167	480	210	297
21	6710	2530	4710	---	---	---	230	150	174	600	210	329
22	6770	2610	4530	---	---	---	190	160	173	560	210	305
23	6350	2830	4480	---	---	---	190	160	173	440	210	284
24	6220	2520	4270	300	230	264	200	150	176	620	220	346
25	6180	2480	4230	280	220	253	210	170	177	780	220	374
26	5940	1940	3900	240	200	221	240	170	187	810	210	394
27	6460	2270	4140	260	190	217	270	180	201	960	230	434
28	5300	1830	3540	330	200	231	280	180	197	1110	230	524
29	5050	1670	3300	340	190	216	---	---	---	1550	240	645
30	---	---	---	280	200	229	---	---	---	1870	260	814
31	---	---	---	330	210	225	---	---	---	2280	260	891
MONTH	7340	320	3270	7460	190	1910	860	150	206	2280	180	400

01482100 DELAWARE RIVER AT DELAWARE MEMORIAL BRIDGE, NEAR WILMINGTON, DE--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	2220	280	982	4870	1300	2820	---	---	---	8190	4260	6160
2	2380	310	1100	4930	1390	2900	---	---	---	8600	4300	6200
3	2340	350	1250	4700	1370	2830	---	---	---	10100	4140	5950
4	2700	380	1250	4500	1370	2860	---	---	---	7930	4270	6000
5	2560	400	1340	4860	1530	3070	---	---	---	7330	4430	5850
6	2610	460	1410	4430	1330	2940	---	---	---	10000	4360	5840
7	2790	450	1510	4750	1450	2920	---	---	---	8280	4230	5870
8	2830	540	1580	4840	1500	3030	---	---	---	10300	4450	6310
9	2860	360	1400	5310	1530	2950	---	---	---	10000	4510	6500
10	3180	560	1570	5360	1670	3050	---	---	---	10100	4560	6440
11	3080	580	1600	4970	1750	3220	---	---	---	10100	4320	6280
12	2950	590	1650	5730	1770	3340	---	---	---	7730	4290	5960
13	3430	660	1810	5710	1870	3480	5720	2510	4050	8420	4650	6310
14	3340	720	1870	5490	1830	3530	7230	2580	4590	10100	4880	6620
15	3660	740	2090	5890	2120	3670	6280	2600	4360	10000	4770	6610
16	3630	840	2020	5200	1870	3510	6110	2550	4320	10000	5130	6980
17	3340	860	1990	4720	1820	3310	6640	2810	4580	10400	5100	7250
18	3800	1030	2190	4350	1900	3270	6710	3140	4790	10100	4080	6190
19	3190	970	2120	4450	1980	3340	7230	3080	4860	10000	4050	6000
20	3470	1120	2250	4320	2050	3260	7460	2890	4980	10000	4230	6040
21	3740	1150	2480	4340	1880	3110	8700	3380	5450	10300	4420	6170
22	4120	1170	2420	4150	1890	3000	8960	3520	5900	10300	4160	6390
23	3960	1210	2410	3940	1760	2920	10100	3360	5890	10400	4540	6950
24	3940	1200	2360	4910	1730	2910	10400	3540	6050	10500	4650	7260
25	3610	1180	2350	5090	1940	3260	9640	3570	6130	10600	5160	7910
26	3930	1260	2390	5030	1980	3370	10200	3670	6540	10600	4550	7470
27	4080	1330	2630	6000	2030	3590	10400	3840	6790	10100	4360	6840
28	4200	1260	2670	6220	2170	---	10500	4000	7420	10500	4490	7320
29	4650	1400	2800	---	---	---	10400	4240	7000	10500	4390	7130
30	4900	1220	2770	---	---	---	9800	4330	7270	10600	4900	7500
31	---	---	---	---	---	---	10300	4010	6620	---	---	---
MONTH	4900	280	1940	6220	1300	3170	10500	2510	5660	10600	4050	6540
YEAR	10600	150	2090									

OXYGEN, DISSOLVED (DO), MG/L, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	4.3	2.7	3.6	7.8	5.9	6.8	8.5	6.6	7.3	10.6	9.0	9.7
2	3.8	1.8	2.9	7.7	5.8	6.8	8.2	6.8	7.4	10.4	8.9	9.5
3	4.6	.5	2.6	7.7	5.5	6.7	8.9	7.5	8.0	10.2	8.9	9.5
4	4.4	1.6	3.2	8.0	5.3	6.6	9.1	7.9	8.4	10.2	9.0	9.5
5	4.4	2.4	3.5	7.8	5.3	6.5	9.5	8.1	8.5	11.1	9.7	10.2
6	4.9	3.2	4.0	7.2	5.0	6.1	9.4	8.2	8.8	11.0	9.9	10.4
7	5.2	2.9	4.5	6.9	4.8	5.9	9.4	8.1	8.8	11.4	10.1	10.7
8	5.7	4.8	5.3	7.2	5.0	6.0	9.6	8.3	8.9	10.9	10.1	10.5
9	6.4	5.4	5.9	7.1	5.0	6.0	10.2	8.6	9.3	10.9	10.1	10.5
10	6.7	5.8	6.1	6.8	5.2	6.1	10.2	8.9	9.6	10.9	10.1	10.5
11	6.6	5.9	6.3	6.9	5.1	6.0	10.6	9.1	9.7	11.1	10.0	10.6
12	6.7	6.2	6.5	7.4	5.3	6.5	10.3	8.9	9.6	11.0	10.2	10.6
13	---	---	---	7.8	6.1	7.1	10.3	8.7	9.6	11.1	10.2	10.6
14	---	---	---	7.8	6.3	7.2	10.4	8.9	9.7	11.6	10.4	10.9
15	---	---	---	8.5	6.4	7.5	10.4	9.1	9.8	11.9	10.3	11.1
16	---	---	---	8.5	7.0	7.8	10.3	8.7	9.7	12.2	10.6	11.4
17	---	---	---	8.9	7.3	8.1	10.6	8.7	9.5	12.1	10.4	11.3
18	6.5	6.2	6.4	8.9	7.4	8.1	11.2	9.0	10.0	11.7	10.0	11.0
19	6.6	6.1	6.3	9.1	7.4	8.2	11.2	9.2	10.3	11.8	9.8	10.6
20	6.7	5.9	6.2	8.8	7.1	8.1	11.9	10.0	10.9	11.4	9.8	10.5
21	6.4	5.5	5.9	8.6	6.9	7.9	11.9	10.1	11.2	11.5	9.7	10.5
22	6.0	5.2	5.5	8.5	6.6	7.8	11.6	9.9	11.0	11.4	9.7	10.5
23	6.5	5.0	5.5	8.2	6.4	7.5	11.4	9.6	10.8	11.5	9.7	10.6
24	6.8	5.5	6.0	8.4	6.4	7.5	11.3	9.5	10.5	11.4	9.6	10.6
25	7.4	5.7	6.3	8.2	6.3	7.5	11.1	9.5	10.6	11.5	9.9	10.7
26	7.6	5.7	6.5	9.3	6.5	8.1	10.8	9.1	10.1	11.3	9.9	10.6
27	7.9	5.8	6.7	8.6	6.6	7.7	10.7	8.8	9.8	11.6	9.8	10.7
28	7.8	5.8	6.9	8.2	6.4	7.4	10.5	8.8	9.7	11.6	9.8	10.7
29	7.7	5.9	6.7	8.0	6.3	7.1	10.5	8.9	9.7	11.6	9.8	10.6
30	7.7	5.8	6.7	8.2	6.4	7.2	10.7	9.1	9.8	11.6	9.8	10.6
31	7.7	5.9	6.8	---	---	---	10.9	9.1	9.8	12.4	10.2	11.2
MONTH	7.9	.5	5.5	9.3	4.8	7.1	11.9	6.6	9.6	12.4	8.9	10.6

01482100 DELAWARE RIVER AT DELAWARE MEMORIAL BRIDGE, NEAR WILMINGTON, DE--Continued

OXYGEN, DISSOLVED (DO), MG/L, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	12.4	10.2	11.3	12.5	10.8	11.8	9.6	9.2	9.4	---	---	---
2	13.0	10.9	11.9	13.0	11.2	12.2	9.6	9.2	9.3	---	---	---
3	13.3	11.1	12.3	13.2	11.8	12.6	9.3	9.0	9.1	---	---	---
4	13.6	11.6	12.6	13.5	12.1	12.9	9.1	8.8	8.9	---	---	---
5	13.5	11.6	12.7	13.4	12.1	12.8	9.1	8.8	8.9	---	---	---
6	13.4	11.7	12.7	13.3	11.8	12.6	9.1	8.6	8.8	---	---	---
7	13.6	12.1	13.0	13.2	11.8	12.6	9.0	8.5	8.7	---	---	---
8	13.7	12.3	13.1	13.3	11.8	---	8.9	8.3	8.6	---	---	---
9	13.7	12.3	13.1	---	---	---	8.9	8.4	8.6	---	---	---
10	13.5	12.1	13.0	---	---	---	8.6	8.1	8.3	---	---	---
11	13.6	12.1	13.0	---	---	---	8.3	7.6	8.0	---	---	---
12	13.5	11.8	12.8	---	---	---	7.9	7.1	7.6	---	---	---
13	13.3	11.9	12.7	---	---	---	7.6	7.0	7.3	7.8	6.3	7.1
14	13.2	11.8	12.6	---	---	---	8.0	7.0	7.4	7.7	5.7	6.9
15	13.2	11.5	12.4	---	---	---	8.0	7.0	7.4	7.5	5.7	6.9
16	13.4	11.7	12.5	---	---	---	7.7	7.0	7.3	7.8	5.8	7.0
17	13.1	11.4	12.4	---	---	---	7.8	7.0	7.4	7.8	6.1	7.1
18	13.2	11.6	12.5	---	---	---	7.8	6.9	7.2	7.7	6.7	7.3
19	13.1	11.6	12.4	---	---	---	7.5	6.7	7.0	7.6	6.5	7.1
20	13.0	11.5	12.4	---	---	---	7.2	6.5	6.8	7.4	6.3	7.0
21	13.0	11.4	12.3	---	---	---	7.1	6.7	6.9	7.4	6.7	7.1
22	12.9	11.5	12.3	---	---	---	7.2	6.6	6.9	7.6	6.7	7.1
23	12.8	11.5	12.2	---	---	---	7.3	6.8	7.1	7.7	6.8	7.1
24	12.6	11.2	11.9	9.2	8.6	8.8	7.3	6.8	7.1	7.4	6.7	7.0
25	12.5	10.9	11.8	9.3	8.6	8.9	7.4	6.8	7.1	7.2	6.4	6.7
26	12.3	10.6	11.7	9.6	9.0	9.3	7.3	6.7	7.1	6.8	6.2	6.5
27	12.8	11.1	12.0	9.8	9.3	9.5	7.3	6.6	7.0	6.6	6.1	6.3
28	12.5	10.9	11.8	9.7	9.2	9.4	7.5	7.0	7.3	6.6	5.8	6.1
29	12.4	10.8	11.7	9.6	9.3	9.4	---	---	---	6.4	5.3	5.8
30	---	---	---	9.5	9.2	9.3	---	---	---	6.3	5.1	5.7
31	---	---	---	9.6	9.3	9.5	---	---	---	6.2	4.7	5.4
MONTH	13.7	10.2	12.4	13.5	8.6	10.8	9.6	6.5	7.8	7.8	4.7	6.7

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	5.8	4.3	5.1	5.3	3.2	4.4	---	---	---	5.2	4.2	4.8
2	5.6	4.1	4.9	5.3	3.3	4.4	---	---	---	5.3	4.2	4.8
3	5.7	3.9	4.9	4.9	2.9	4.0	---	---	---	5.3	4.2	4.7
4	5.7	3.7	4.9	4.5	2.5	3.7	---	---	---	5.5	4.2	4.8
5	5.9	3.7	5.0	4.7	2.5	3.7	---	---	---	5.3	4.3	4.8
6	5.8	3.6	4.9	4.8	2.7	3.8	---	---	---	5.3	4.3	4.8
7	5.7	3.3	4.8	5.0	3.2	4.1	---	---	---	5.4	4.2	4.8
8	6.0	3.6	4.8	5.0	3.4	4.3	---	---	---	5.7	4.3	5.0
9	6.7	3.2	5.2	5.2	3.3	4.2	---	---	---	5.6	4.3	5.1
10	6.7	4.3	5.5	5.1	3.1	4.0	---	---	---	5.8	4.6	5.3
11	6.4	4.1	5.4	4.9	2.9	3.8	---	---	---	6.3	4.6	5.4
12	6.3	3.9	5.3	4.8	2.8	3.8	---	---	---	6.2	4.7	5.5
13	6.1	3.7	5.1	4.8	3.0	3.9	6.4	4.3	4.7	6.2	4.9	5.6
14	6.1	3.7	5.1	4.9	2.9	4.0	5.3	4.1	4.7	6.3	5.1	5.6
15	5.8	3.7	4.8	4.9	3.3	4.3	5.1	4.0	4.6	6.0	4.9	5.5
16	5.5	3.5	4.7	5.0	3.6	4.4	5.3	4.0	4.7	6.1	5.1	5.7
17	5.3	3.4	4.6	4.8	3.5	4.3	5.8	4.5	5.1	6.4	5.3	5.8
18	5.6	3.7	4.7	4.8	3.4	4.2	5.6	4.6	5.1	6.1	5.1	5.7
19	5.7	3.5	4.8	4.8	3.2	4.0	5.4	4.4	5.0	6.0	5.0	5.5
20	6.0	4.1	5.1	4.7	3.2	4.0	5.6	4.3	4.9	6.1	4.9	5.5
21	6.4	3.9	5.4	4.6	3.2	4.0	5.7	4.5	5.1	5.9	4.9	5.5
22	6.3	4.1	5.4	4.7	3.3	4.0	5.7	4.6	5.2	5.8	4.7	5.3
23	6.2	4.1	5.2	4.6	3.4	4.1	5.5	4.2	5.0	5.7	4.6	5.2
24	5.9	4.0	5.1	5.2	3.3	4.2	5.5	4.0	4.8	6.0	4.6	5.4
25	5.7	4.0	5.0	5.1	3.8	4.4	5.3	4.0	4.7	5.9	4.9	5.5
26	5.8	3.8	4.8	5.0	3.8	4.4	5.5	4.0	4.8	5.8	4.7	5.3
27	5.6	3.5	4.6	5.2	3.8	4.5	5.4	3.9	4.7	6.1	4.7	5.5
28	5.4	3.3	4.6	5.2	3.9	---	5.3	3.9	4.7	6.2	5.0	5.7
29	5.6	3.4	4.6	---	---	---	5.2	4.0	4.7	6.5	5.2	5.8
30	5.4	3.2	4.4	---	---	---	5.2	4.0	4.7	6.4	5.5	6.0
31	---	---	---	---	---	---	5.3	4.1	4.8	---	---	---
MONTH	6.7	3.2	5.0	5.3	2.5	4.1	6.4	3.9	4.8	6.5	4.2	5.3
YEAR	13.7	.5	7.5									

01482100 DELAWARE RIVER AT DELAWARE MEMORIAL BRIDGE, NEAR WILMINGTON, DE--Continued

PH (STANDARD UNITS), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	6.6	6.2	6.4	6.7	6.2	6.4	6.5	6.3	6.4	6.9	6.5	6.7
2	6.5	6.2	6.3	6.6	6.2	6.4	6.4	6.3	6.3	6.9	6.5	6.7
3	6.4	6.1	6.2	6.6	6.2	6.4	6.5	6.3	6.4	6.9	6.5	6.7
4	6.4	6.1	6.2	6.7	6.2	6.4	6.5	6.4	6.4	6.7	6.4	6.5
5	6.4	6.1	6.2	6.6	6.2	6.4	6.6	6.4	6.5	6.8	6.5	6.6
6	6.3	6.2	6.2	6.6	6.2	6.3	6.6	6.5	6.5	7.1	6.5	6.8
7	6.4	6.2	6.3	6.5	6.2	6.3	6.6	6.4	6.5	6.9	6.5	6.7
8	6.4	6.2	6.3	6.5	6.2	6.3	6.6	6.3	6.5	7.1	6.6	6.9
9	6.4	6.3	6.4	6.5	6.2	6.3	6.6	6.3	6.5	7.0	6.6	6.8
10	6.4	6.3	6.3	6.5	6.2	6.3	6.6	6.3	6.5	7.0	6.6	6.8
11	6.3	6.2	6.3	6.4	6.2	6.3	6.6	6.4	6.5	7.1	6.5	6.9
12	6.5	6.3	6.4	6.5	6.3	6.4	6.6	6.3	6.4	7.1	6.6	6.8
13	6.5	6.3	6.4	6.5	6.3	6.4	6.6	6.3	6.4	6.8	6.5	6.6
14	---	---	---	6.5	6.3	6.4	6.6	6.3	6.5	7.2	6.5	6.8
15	---	---	---	6.6	6.3	6.4	6.6	6.3	6.5	7.0	6.7	---
16	---	---	---	6.6	6.4	6.5	6.8	6.3	6.6	7.2	6.6	6.8
17	---	---	---	6.7	6.4	6.5	6.8	6.2	6.4	7.1	6.5	6.8
18	6.4	6.3	6.3	6.7	6.4	6.5	6.8	6.2	6.5	7.0	6.5	6.8
19	6.4	6.2	6.3	6.7	6.4	6.5	6.8	6.3	6.6	7.1	6.5	6.8
20	6.5	6.2	6.3	6.7	6.4	6.5	6.9	6.3	6.6	7.1	6.4	6.7
21	6.5	6.1	6.3	6.7	6.3	6.5	6.9	6.4	6.7	6.9	6.3	6.6
22	6.5	6.1	6.3	6.8	6.3	6.5	7.3	6.4	6.8	6.8	6.3	6.6
23	6.6	6.1	6.3	6.7	6.3	6.5	7.4	6.6	7.0	7.0	6.3	6.8
24	6.5	6.2	6.3	6.8	6.3	6.5	7.3	6.5	7.0	6.7	6.3	6.5
25	6.6	6.2	6.3	6.8	6.3	6.6	7.3	6.5	6.9	6.7	6.3	6.5
26	6.5	6.2	6.3	7.0	6.4	6.7	7.0	6.5	6.8	6.8	6.4	6.6
27	6.6	6.2	6.4	6.8	6.4	6.6	6.9	6.4	6.7	6.8	6.3	6.6
28	6.6	6.2	6.4	6.6	6.3	6.5	6.9	6.4	6.7	6.8	6.4	6.7
29	6.6	6.2	6.4	6.4	6.3	6.3	6.9	6.5	6.7	6.9	6.4	6.6
30	6.6	6.2	6.4	6.4	6.2	6.3	7.2	6.5	6.9	6.7	6.3	6.5
31	6.6	6.2	6.4	---	---	---	7.1	6.5	6.8	6.8	6.3	6.6
MONTH	6.6	6.1	6.3	7.0	6.2	6.4	7.4	6.2	6.6	7.2	6.3	6.7

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	6.8	6.3	6.5	7.1	6.6	6.9	6.8	6.2	6.4	---	---	---
2	6.9	6.4	6.6	7.1	6.7	6.9	7.0	6.3	6.6	---	---	---
3	7.0	6.4	6.7	7.3	6.8	7.1	6.8	6.4	6.6	---	---	---
4	7.2	6.5	6.8	7.4	7.0	7.3	6.8	6.4	6.7	---	---	---
5	7.3	6.6	6.9	7.4	7.0	7.2	6.8	6.5	6.7	---	---	---
6	7.1	6.6	6.8	7.5	7.0	7.3	6.9	6.6	6.7	---	---	---
7	7.2	6.7	7.0	7.5	7.0	7.2	6.7	6.5	6.6	---	---	---
8	7.4	6.8	7.1	7.5	7.1	---	6.8	6.5	6.6	---	---	---
9	7.2	6.9	7.1	---	---	---	6.6	6.5	6.6	---	---	---
10	7.3	6.8	7.1	---	---	---	6.6	6.4	6.5	---	---	---
11	7.2	6.8	7.1	---	---	---	6.6	6.4	6.5	---	---	---
12	7.2	6.9	7.1	---	---	---	6.6	6.4	6.5	---	---	---
13	7.3	6.8	7.1	---	---	---	6.5	6.4	6.5	6.7	6.4	6.6
14	7.4	6.8	7.1	---	---	---	6.7	6.4	6.4	6.7	6.2	6.4
15	7.3	6.9	7.1	---	---	---	6.7	6.4	6.5	6.5	6.1	6.3
16	7.4	6.9	7.1	---	---	---	6.5	6.4	6.4	6.6	6.1	6.4
17	7.2	6.8	7.0	---	---	---	6.5	6.3	6.4	6.6	6.2	6.4
18	7.2	6.8	7.0	---	---	---	6.5	6.3	6.4	6.7	6.2	6.4
19	7.3	6.8	7.1	---	---	---	6.5	6.3	6.4	6.7	6.3	6.4
20	7.4	6.9	7.2	---	---	---	6.5	6.3	6.4	6.5	6.2	6.4
21	7.5	6.9	7.2	---	---	---	6.5	6.3	6.4	6.5	6.3	6.4
22	7.2	6.9	7.1	---	---	---	6.5	6.3	6.3	6.8	6.3	6.5
23	7.4	7.0	7.2	---	---	---	6.4	6.3	6.4	6.7	6.4	6.5
24	7.3	7.0	7.2	6.6	6.5	6.6	6.4	6.3	6.4	6.7	6.4	6.6
25	7.2	6.8	7.0	6.6	6.4	6.5	6.5	6.3	6.4	6.7	6.4	6.5
26	7.1	6.7	6.9	6.5	6.4	6.5	6.4	6.3	6.4	6.6	6.3	6.5
27	7.1	6.8	7.0	6.5	6.3	6.4	6.4	6.2	6.3	6.6	6.3	6.5
28	7.2	6.7	7.0	6.5	6.2	6.4	6.4	6.3	6.3	6.7	6.3	6.5
29	7.1	6.7	6.9	6.6	6.2	6.4	---	---	---	6.8	6.3	6.5
30	---	---	---	6.7	6.3	6.5	---	---	---	6.8	6.3	6.5
31	---	---	---	6.3	6.2	6.2	---	---	---	6.8	6.3	6.5
MONTH	7.5	6.3	7.0	7.5	6.2	6.8	7.0	6.2	6.5	6.8	6.1	6.5

01482100 DELAWARE RIVER AT DELAWARE MEMORIAL BRIDGE, NEAR WILMINGTON, DE--Continued

PH (STANDARD UNITS), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	6.8	6.4	6.6	6.8	6.4	6.6	---	---	---	7.0	6.8	6.9
2	6.9	6.4	6.6	6.8	6.4	6.6	---	---	---	7.1	6.8	6.9
3	6.8	6.1	6.5	6.8	6.4	6.6	---	---	---	7.0	6.8	6.9
4	6.6	6.1	6.3	6.8	6.4	6.6	---	---	---	7.1	6.8	6.9
5	6.7	6.1	6.4	6.8	6.4	6.6	---	---	---	7.0	6.8	6.9
6	6.6	6.2	6.4	6.7	6.4	6.6	---	---	---	7.0	6.8	6.9
7	6.8	6.2	6.5	6.8	6.4	6.6	---	---	---	7.0	6.7	6.9
8	6.7	6.2	6.5	6.7	6.4	6.6	---	---	---	7.0	6.7	6.9
9	6.8	6.0	6.4	6.8	6.4	6.6	---	---	---	7.0	6.7	6.8
10	6.9	6.2	6.5	6.8	6.4	6.6	---	---	---	6.9	6.7	6.8
11	6.8	6.2	6.5	6.7	6.4	6.6	---	---	---	6.9	6.7	6.8
12	6.7	6.2	6.5	6.7	6.4	6.6	---	---	---	6.8	6.7	6.8
13	6.7	6.3	6.5	6.7	6.4	6.6	6.6	6.5	6.6	6.8	6.7	6.7
14	6.8	6.3	6.5	6.7	6.4	6.6	6.9	6.5	6.7	6.9	6.7	6.8
15	6.8	6.3	6.6	6.7	6.5	6.6	6.9	6.6	6.8	6.9	6.7	6.8
16	6.7	6.2	6.5	6.8	6.6	6.7	6.8	6.6	6.7	7.0	6.8	6.9
17	6.7	6.2	6.5	6.8	6.6	6.7	7.0	6.6	6.8	7.2	6.8	7.0
18	6.7	6.3	6.5	6.8	6.6	6.7	6.9	6.7	6.8	7.0	6.8	6.9
19	6.7	6.3	6.5	6.8	6.6	6.7	6.9	6.7	6.8	7.0	6.8	6.9
20	6.7	6.3	6.5	6.8	6.6	6.7	7.0	6.7	6.8	7.1	6.8	6.9
21	6.8	6.3	6.6	6.8	6.6	6.7	7.0	6.7	6.8	7.1	6.8	6.9
22	6.8	6.4	6.6	6.8	6.5	6.7	7.0	6.7	6.9	7.1	6.8	6.9
23	6.8	6.4	6.6	6.7	6.5	6.6	7.0	6.7	6.9	7.0	6.8	6.9
24	6.8	6.4	6.6	6.9	6.5	6.7	7.0	6.7	6.8	7.0	6.7	6.9
25	6.8	6.4	6.6	6.9	6.6	6.7	7.0	6.6	6.8	7.0	6.7	6.9
26	6.8	6.4	6.6	6.9	6.6	6.8	7.0	6.7	6.8	7.0	6.7	6.8
27	6.8	6.4	6.6	6.9	6.6	6.8	7.0	6.7	6.8	7.0	6.6	6.8
28	6.8	6.4	6.6	6.9	6.6	---	6.9	6.7	6.8	7.0	6.7	6.9
29	6.9	6.4	6.7	---	---	---	7.0	6.7	6.8	7.0	6.7	6.9
30	6.8	6.4	6.6	---	---	---	7.0	6.7	6.9	7.0	6.8	6.9
31	---	---	---	---	---	---	7.0	6.8	6.9	---	---	---
MONTH	6.9	6.0	6.5	6.9	6.4	6.7	7.0	6.5	6.8	7.2	6.6	6.9
YEAR	7.5	6.0	6.6									

01482500 SALEM RIVER AT WOODSTOWN, NJ

LOCATION.--Lat 39°38'36", long 75°19'52", Salem County, Hydrologic Unit 02040206, on right end of Memorial Lake Dam at Woodstown, 0.2 mi (0.3 km) upstream from small brook, and 0.3 mi (0.5 km) downstream from Pennsylvania-Reading Seashore Lines bridge.

DRAINAGE AREA.--14.6 mi² (37.8 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--March to September 1940, December 1941 to current year. Prior to October 1952, published as "Salem Creek at Woodstown".

REVISED RECORDS.--WSP 1432: 1951(M). WSP 1702: 1959.

GAGE.--Water-stage recorder above concrete dam. Datum of gage is 19.49 ft (5.941 m) National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1977 at datum 10.00 ft (3.048 m) higher.

REMARKS.--Water-discharge records good except those for period of no gage-height record, June 7 to June 30, which are fair.

AVERAGE DISCHARGE.--38 years (water years 1943-80), 19.2 ft³/s (0.544 m³/s), 17.86 in/yr (454 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 22,000 ft³/s (623 m³/s) Sept. 1, 1940, gage height, 17.98 ft (5.480 m) present datum, from floodmark, from rating curve extended above 220 ft³/s (6.23 m³/s) on basis of slope-area measurement of peak flow at site 0.5 mi (0.8 km) downstream; no flow for short periods during many years just after waste gate was closed and water was below spillway.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 216 ft³/s (6.12 m³/s) Oct. 10, gage height, 11.63 ft (3.545 m), no peaks above base of 350 ft ³/s (9.91 m³/s); minimum daily, 2.0 ft³/s (0.057 m³/s) Aug. 22-25.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	84	15	15	12	8.0	6.6	103	79	4.7	15	8.4	5.7
2	70	15	15	12	7.2	7.2	35	34	4.7	4.3	5.9	5.9
3	92	41	14	11	6.5	7.2	24	22	5.7	4.3	5.0	4.5
4	46	38	15	9.7	7.2	8.6	51	16	9.4	4.7	9.5	3.6
5	30	23	15	12	7.2	13	44	13	7.8	7.0	5.0	3.6
6	33	18	17	12	7.2	16	24	12	5.9	6.6	3.7	3.6
7	25	17	31	11	8.2	12	18	12	6.4	5.5	4.1	3.6
8	22	15	22	12	9.3	13	15	13	10	4.2	4.7	3.6
9	20	15	16	13	9.4	17	50	15	8.0	3.6	4.7	3.6
10	120	18	15	11	9.4	13	121	13	9.0	5.4	4.7	3.6
11	94	27	15	28	8.9	15	41	12	11	8.8	6.1	3.6
12	45	78	15	115	9.4	11	24	12	9.0	6.0	11	3.6
13	52	37	23	36	8.1	15	19	14	7.0	3.9	6.5	3.6
14	38	30	33	25	7.6	113	18	11	6.5	3.6	3.7	3.6
15	26	24	21	20	9.4	42	30	7.9	6.0	4.0	3.6	3.6
16	22	21	18	17	16	23	20	7.2	6.0	5.8	4.1	3.6
17	19	18	16	15	18	18	15	7.2	11	4.8	2.8	3.6
18	18	18	13	19	11	22	13	11	10	5.6	2.7	15
19	17	17	14	56	9.4	17	12	17	8.0	5.9	3.5	5.5
20	18	18	15	28	9.4	14	11	13	6.5	5.9	4.4	3.2
21	18	17	15	20	11	72	9.4	16	6.0	5.3	2.4	2.8
22	18	18	16	20	18	73	8.2	16	5.5	5.1	2.0	3.6
23	18	18	18	34	33	30	7.2	10	5.2	7.8	2.0	4.7
24	19	18	18	21	24	22	7.2	7.4	5.0	5.1	2.0	4.3
25	19	18	31	16	18	114	7.2	7.2	4.8	3.6	2.0	4.4
26	16	46	25	15	13	40	7.2	5.8	4.7	5.6	2.6	5.9
27	15	43	18	13	10	20	14	4.7	4.6	6.1	2.7	4.1
28	15	25	15	13	9.6	20	25	4.7	5.0	3.4	2.7	3.6
29	15	19	14	12	9.1	51	81	4.7	8.0	23	2.7	3.6
30	15	16	13	10	---	51	35	4.7	20	15	2.7	3.6
31	14	---	12	9.4	---	82	---	4.7	---	5.0	4.1	---
TOTAL	1073	741	553	658.1	332.5	978.6	889.4	427.2	221.4	199.9	132.0	130.8
MEAN	34.6	24.7	17.8	21.2	11.5	31.6	29.6	13.8	7.38	6.45	4.26	4.36
MAX	120	78	33	115	33	114	121	79	20	23	11	15
MIN	14	15	12	9.4	6.5	6.6	7.2	4.7	4.6	3.4	2.0	2.8
CFSM	2.37	1.69	1.22	1.45	.79	2.16	2.03	.95	.51	.44	.29	.30
IN.	2.73	1.89	1.41	1.68	.85	2.49	2.27	1.09	.56	.51	.34	.33

CAL YR 1979 TOTAL 10549.1 MEAN 28.9 MAX 518 MIN 4.5 CFSM 1.98 IN 26.88
WTR YR 1980 TOTAL 6336.9 MEAN 17.3 MAX 121 MIN 2.0 CFSM 1.19 IN 16.14

01482500 SALEM RIVER AT WOODSTOWN, NJ--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1973 to current year.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIOCHEM UNINHIB 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)	HARD-NESS (MG/L AS CACO3)
FEB 14...	0900	7.2	229	7.4	4.0	13.2	1.1	23	11	85
APR 02...	0900	35	152	7.2	8.0	11.7	3.7	1600	1600	51
JUN 09...	1000	8.0	212	7.2	20.5	7.6	3.9	2400	5400	79
JUL 02...	1000	4.7	209	7.5	26.0	7.8	5.2	80	20	75
AUG 25...	0920	2.0	227	8.0	24.5	8.4	7.2	330	330	80
SEP 24...	1045	4.7	235	8.6	23.5	8.4	7.2	310	1700	81

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)
FEB 14...	18	9.7	6.7	3.7	24	0	20	--	40	18
APR 02...	11	5.8	4.6	1.2	--	--	--	--	25	9.4
JUN 09...	17	8.9	6.2	4.8	40	0	33	.5	32	17
JUL 02...	16	8.5	5.8	5.1	41	0	34	--	33	18
AUG 25...	17	9.2	6.8	5.4	59	0	48	--	26	19
SEP 24...	18	8.7	6.8	5.5	--	--	--	.0	29	19

DATE	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, ORTHOPH OSPHATE TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
FEB 14...	.1	7.5	135	E5.0	.090	.06	.15	--	.10	2.2
APR 02...	.2	5.9	115	2.1	.260	1.3	1.6	3.7	1.1	4.7
JUN 09...	.2	6.4	164	2.5	.440	.96	1.4	3.9	.54	8.4
JUL 02...	.2	6.5	155	1.5	.260	1.0	1.3	2.8	--	4.5
AUG 25...	.3	9.9	136	.10	<.030	--	1.2	1.3	.98	13
SEP 24...	.2	1.0	145	<.05	.120	.74	.86	--	.64	11

DATE	TIME	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE)	BORON, TOTAL RECOV-ERABLE (UG/L AS B)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)
JUN 09...	1000	20	2	0	40	0	<10	4
SEP 24...	1045	30	3	0	50	1	10	3

DELAWARE RIVER BASIN

01482500 SALEM RIVER AT WOODSTOWN, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI)	SELE- NIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	PHENOLS (UG/L)
JUN								
09...	2600	6	130	<.1	4	1	10	0
SEP								
24...	1500	6	120	<.1	4	0	20	5

01482800 DELAWARE RIVER AT REEDY ISLAND JETTY, DE

LOCATION.--Lat 39°30'03", long 75°34'07", New Castle County, Hydrologic Unit 02040205, water-quality recorder located on platform about 0.4 mi (0.6 km) downstream from Reedy Island near Fort Penn.

DRAINAGE AREA.--11,200 mi² (29,100 km²), approximately.

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1963 to current year.
pH: February 1970 to current year.
WATER TEMPERATURES: February 1970 to current year.
DISSOLVED OXYGEN: February 1970 to current year.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 35,600 micromhos Nov. 15, 1978; minimum, 100 micromhos on several days in 1969, 1970, 1974, and 1979.
pH: Maximum, 8.9 Mar. 4, 1980; minimum, 5.4 Dec. 31, 1972.
WATER TEMPERATURES: Maximum, 30.5°C on several days during August 1980; minimum, freezing poing on many days during winter months.
DISSOLVED OXYGEN: Maximum, 17.1 mg/L Dec. 16, 19, 1976; minimum, 0.3 mg/L Sept. 16, 17, 1971.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	---	---	---	14.0	13.0	13.5	---	---	---	5.5	4.5	5.0
2	---	---	---	14.5	13.5	14.0	---	---	---	5.0	4.5	4.5
3	21.5	21.0	21.0	14.5	13.5	14.0	---	---	---	5.0	4.5	4.5
4	21.5	20.5	21.0	14.0	13.0	13.5	---	---	---	4.5	3.5	4.0
5	21.0	20.5	21.0	13.5	13.0	13.0	9.0	8.5	---	3.5	3.0	3.5
6	20.5	19.5	20.0	13.5	13.0	13.0	8.5	8.0	8.5	3.5	3.0	3.5
7	20.0	18.5	19.5	13.5	12.5	13.0	8.5	8.0	8.5	3.5	2.5	3.0
8	19.0	18.0	18.5	13.0	12.5	12.5	8.5	6.5	7.5	3.5	3.0	3.0
9	18.0	16.5	17.5	13.0	12.5	13.0	8.0	6.5	7.0	3.0	2.5	3.0
10	17.0	15.5	16.0	13.5	13.0	13.0	7.5	6.5	7.0	3.5	2.5	3.0
11	16.5	15.5	16.0	13.0	12.5	12.5	8.0	6.5	7.5	4.0	2.5	3.5
12	16.0	15.5	15.5	13.0	12.5	12.5	8.0	7.0	7.5	4.0	2.0	3.0
13	15.5	15.0	15.5	12.5	12.0	12.0	8.0	7.0	7.5	3.5	2.0	3.0
14	15.0	14.0	14.5	12.5	11.0	12.0	7.5	7.0	7.5	3.5	2.5	3.5
15	15.5	14.0	14.5	12.0	11.0	11.5	7.5	6.5	7.0	4.5	3.5	4.0
16	15.0	13.5	14.5	12.0	11.0	11.5	7.5	6.5	7.0	4.5	3.5	4.0
17	15.0	14.0	14.5	11.5	10.5	11.0	7.0	5.0	6.0	4.0	3.5	4.0
18	16.0	14.5	15.0	12.0	10.5	11.0	6.0	5.0	5.5	4.5	4.0	4.0
19	16.0	14.5	15.0	12.0	11.0	11.0	5.5	4.5	5.0	4.5	4.0	4.0
20	16.0	15.0	15.5	11.5	11.0	11.0	4.5	4.0	4.5	4.5	4.0	4.0
21	17.0	15.5	16.0	12.0	11.0	11.5	4.5	3.5	4.0	4.5	3.5	4.0
22	17.0	15.5	16.0	12.0	11.0	11.5	4.5	4.0	4.0	4.5	4.0	4.0
23	17.0	16.0	16.5	12.0	11.0	11.5	4.5	4.0	4.5	4.5	3.5	4.0
24	16.5	15.5	16.0	12.0	11.5	12.0	5.5	4.5	4.5	3.5	3.0	3.0
25	15.5	14.5	15.0	12.5	12.0	12.0	5.5	5.0	5.0	3.5	3.0	3.0
26	15.0	14.0	14.5	13.0	12.0	12.5	6.0	5.0	5.5	4.0	2.5	3.0
27	14.5	13.5	14.0	13.0	12.0	12.5	5.5	4.5	5.0	3.5	2.5	3.0
28	14.0	13.0	13.5	13.0	12.0	12.5	5.5	4.5	5.0	3.5	3.0	3.0
29	14.0	13.0	13.5	---	---	---	5.5	4.5	5.0	3.5	2.5	3.0
30	14.0	13.0	13.5	---	---	---	6.0	4.5	5.0	2.5	2.0	2.0
31	14.0	12.5	13.0	---	---	---	5.5	4.5	5.0	2.5	1.0	2.0
MONTH	21.5	12.5	16.0	14.5	10.5	12.5	9.0	3.5	6.0	5.5	1.0	3.5

01482800 DELAWARE RIVER AT REEDY ISLAND JETTY, DE --Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	1.5	.5	1.0	1.5	.0	1.0	---	---	---	15.0	14.0	14.5
2	---	---	---	1.0	.0	---	---	---	---	15.5	14.5	15.0
3	---	---	---	---	---	---	---	---	---	16.0	14.5	15.5
4	---	---	---	2.0	1.0	---	---	---	---	16.5	15.0	16.0
5	---	---	---	2.0	1.0	1.5	---	---	---	17.0	15.5	16.5
6	---	---	---	2.5	1.5	2.0	---	---	---	18.0	16.0	17.0
7	---	---	---	3.0	1.5	2.0	---	---	---	18.5	16.5	17.5
8	---	---	---	3.5	2.5	3.0	---	---	---	17.5	16.5	17.0
9	---	---	---	4.5	3.0	3.5	---	---	---	17.5	16.5	17.0
10	---	---	---	4.5	3.0	3.5	13.0	11.5	---	18.0	16.5	17.0
11	---	---	---	5.0	3.5	4.0	13.5	11.5	12.5	17.5	16.5	17.0
12	---	---	---	5.0	3.5	4.0	13.5	12.0	12.5	18.5	17.0	17.5
13	---	---	---	4.0	3.0	3.5	14.0	12.5	13.0	19.0	17.5	18.0
14	---	---	---	4.0	3.5	3.5	13.5	12.5	13.0	19.0	18.0	18.5
15	---	---	---	6.5	3.0	4.0	13.5	13.0	13.5	19.5	18.0	18.5
16	---	---	---	5.0	3.5	4.0	13.0	12.0	12.5	19.5	17.5	18.5
17	---	---	---	5.0	4.0	---	13.0	11.5	---	20.0	18.5	19.0
18	---	---	---	---	---	---	13.5	12.0	12.5	19.0	18.0	18.5
19	---	---	---	6.5	5.5	---	14.0	12.5	13.0	20.0	18.5	19.0
20	2.0	1.5	---	6.5	5.5	6.0	14.5	13.0	14.0	19.5	19.0	19.0
21	3.0	1.5	2.0	7.0	6.0	6.5	14.5	13.5	14.0	19.0	18.5	19.0
22	2.5	1.5	2.0	---	---	---	---	---	---	---	---	---
23	3.5	2.0	2.5	---	---	---	---	---	---	---	---	---
24	4.0	2.5	3.0	---	---	---	---	---	---	---	---	---
25	3.5	2.5	3.0	---	---	---	17.0	15.0	---	---	---	---
26	3.5	2.5	3.0	---	---	---	16.0	15.0	15.5	---	---	---
27	3.0	2.0	2.5	---	---	---	15.5	14.5	15.0	21.0	20.0	20.5
28	3.0	2.0	2.5	---	---	---	15.0	14.5	15.0	21.5	19.5	20.5
29	2.5	1.5	2.0	---	---	---	15.0	14.5	14.5	21.5	20.0	21.0
30	---	---	---	---	---	---	14.5	14.0	14.5	21.5	20.0	21.0
31	---	---	---	---	---	---	---	---	---	22.0	20.5	21.0
MONTH	4.0	.5	2.5	7.0	.0	3.5	17.0	11.5	13.5	22.0	14.0	18.0

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	22.5	21.0	22.0	26.0	24.5	25.0	29.5	28.0	28.5	28.5	27.0	27.5
2	23.0	21.5	22.5	26.0	24.5	25.5	29.5	28.0	28.5	29.0	27.5	28.0
3	23.5	22.0	22.5	25.5	25.0	25.5	29.5	28.0	28.5	29.0	27.5	28.0
4	23.5	22.0	22.5	27.0	25.0	26.0	30.0	28.5	29.0	29.0	27.0	28.0
5	23.0	22.0	22.5	27.0	25.5	26.0	30.0	28.5	29.0	28.0	27.0	27.5
6	22.5	22.0	22.5	27.0	25.5	26.5	30.5	29.0	29.5	28.5	27.0	27.5
7	24.0	22.0	22.5	27.0	25.5	26.0	30.5	29.0	29.5	28.0	27.0	27.5
8	23.5	22.0	23.0	26.0	25.0	25.5	30.5	29.0	29.5	28.0	26.0	27.0
9	22.5	21.5	22.0	27.0	25.0	26.0	30.0	29.0	29.5	27.0	26.5	26.5
10	22.0	21.0	21.5	27.5	25.5	26.0	30.0	29.0	29.5	27.0	26.0	26.5
11	22.5	20.5	21.5	27.5	26.0	26.5	30.0	29.0	29.5	26.5	25.0	26.0
12	22.5	21.0	21.5	27.0	26.0	26.5	29.5	28.5	29.5	26.5	25.0	25.5
13	22.5	21.0	22.0	27.5	25.5	26.5	29.5	28.5	29.0	26.0	25.0	25.5
14	23.5	21.5	22.0	28.0	26.0	27.0	29.0	28.5	29.0	26.5	25.0	25.5
15	23.0	21.5	22.5	27.5	26.0	27.0	29.0	28.0	28.5	26.0	24.5	25.5
16	22.5	22.0	22.5	28.0	26.5	27.0	28.5	27.0	28.0	25.5	24.0	24.5
17	23.0	21.5	22.5	---	---	---	28.0	26.5	27.0	25.0	24.0	24.5
18	23.0	21.5	22.0	---	---	---	27.0	26.0	26.5	25.0	24.0	24.5
19	23.5	22.0	22.5	---	---	---	26.5	26.0	26.0	25.5	24.0	24.5
20	23.0	22.0	22.0	---	---	---	27.0	26.0	26.5	24.5	24.0	24.5
21	23.0	22.0	22.5	29.0	28.5	---	26.5	25.5	26.0	25.5	24.0	24.5
22	24.0	22.0	22.5	30.0	28.0	29.0	26.0	25.0	25.5	26.0	24.5	25.0
23	25.0	22.5	23.0	29.0	28.0	28.5	26.5	25.0	25.5	25.5	24.5	25.0
24	24.5	23.0	23.5	29.0	28.0	28.5	27.5	25.0	26.0	25.0	24.0	24.5
25	25.0	23.5	24.0	29.5	27.5	28.5	27.0	25.5	26.0	24.0	23.5	24.0
26	24.5	23.5	24.0	29.5	27.5	28.5	27.5	25.5	26.5	24.0	23.0	23.5
27	25.5	23.5	24.5	29.0	28.0	28.5	27.5	26.0	26.5	23.0	22.0	22.5
28	25.5	24.0	25.0	28.5	27.5	28.0	28.0	26.5	27.0	22.5	21.5	22.0
29	25.5	23.5	25.0	28.5	27.5	28.0	27.5	26.5	27.0	22.0	21.0	22.0
30	25.5	24.5	25.0	29.0	28.0	28.5	27.5	26.5	27.0	22.0	21.0	21.5
31	---	---	---	29.0	28.0	28.5	28.0	27.0	27.5	---	---	---
MONTH	25.5	20.5	23.0	30.0	24.5	27.0	30.5	25.0	28.0	29.0	21.0	25.5
YEAR	30.5	.0	16.5									

01482800 DELAWARE RIVER AT REEDY ISLAND JETTY, DE.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	---	---	---	10400	3400	5880	---	---	---	8560	2320	4220
2	---	---	---	9800	3400	5450	---	---	---	8360	2560	4290
3	9600	2760	5400	8360	2720	4600	---	---	---	7960	2400	4250
4	7920	2160	4220	8720	2720	4680	---	---	---	7000	2600	3870
5	8400	2040	4000	8320	2720	4320	10400	1800	3920	9240	3200	5100
6	6320	1560	2860	7120	2320	4070	8040	1600	3470	10000	3760	6620
7	4200	1200	2180	5560	2160	3280	8400	1960	3460	9640	3600	6700
8	2160	800	1510	7560	2200	3700	6560	600	2180	5600	2720	3680
9	1560	800	1110	5960	2200	3420	7520	800	2050	5960	2760	4040
10	2600	760	1140	5920	1920	3090	7000	800	2210	6400	2760	4290
11	3520	560	1440	5400	1800	3090	9640	1000	4050	7400	2960	5140
12	2200	400	971	7000	2600	4620	10000	800	2990	6160	1760	3480
13	2000	400	713	10600	2600	6160	5400	800	2440	4560	1400	2740
14	4720	400	1480	11200	3200	6570	7640	1160	4180	8000	2200	4790
15	8040	400	4040	11200	2840	7450	8440	2040	5160	8720	3000	5660
16	9560	840	4070	10400	2800	6030	9560	2600	5190	10200	3200	6230
17	10000	1600	5280	10400	2160	5540	6600	1920	3510	7400	3640	5130
18	10000	2440	5570	8800	2200	4510	8840	2000	4360	5520	4200	4700
19	9160	2800	5200	9920	2800	5480	10200	2440	5150	4840	4000	4470
20	9520	2960	5440	9960	3200	5460	11100	3960	6460	4840	4000	4320
21	8800	2800	4960	10200	3200	5690	10600	3760	6670	9360	3800	5100
22	7560	2760	4450	10000	3600	5600	9360	3960	6180	9120	3800	5270
23	8440	2720	4960	9120	3640	5370	9360	4000	5950	10200	3800	5970
24	8800	2800	4990	7760	3400	4930	9160	4000	5960	6600	3520	4430
25	7800	2360	4080	7920	3200	4750	8440	4560	6140	7200	2960	4100
26	7640	2000	3880	8800	3520	5650	7120	4000	5150	6400	2840	3980
27	11200	2040	5310	4840	2040	3420	7520	3000	4240	8440	2400	4270
28	10200	2800	6070	4400	800	2580	5920	2720	3500	10300	2840	5310
29	10000	2800	5410	---	---	---	5160	2000	3060	10600	2960	5100
30	10400	2840	5640	---	---	---	6800	2040	3310	8720	2560	4250
31	12000	3240	5970	---	---	---	8440	2200	3930	10800	2720	5620
MONTH	12000	400	3870	11200	800	4840	11100	600	4250	10800	1400	4750

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	10700	3600	6050	16000	10200	11800	---	---	---	4440	960	2170
2	---	---	---	14700	11400	---	---	---	---	6000	760	2400
3	---	---	---	---	---	---	---	---	---	6320	800	2520
4	---	---	---	18600	10400	---	---	---	---	5520	800	1840
5	---	---	---	20600	11600	17000	---	---	---	5000	800	2110
6	---	---	---	19200	9240	13500	---	---	---	6160	840	2560
7	---	---	---	20000	8840	14800	---	---	---	6000	1000	2740
8	---	---	---	19600	9520	13900	---	---	---	5640	1160	2870
9	---	---	---	17600	10000	12300	---	---	---	6360	1240	3010
10	---	---	---	18800	10400	13900	840	360	---	8160	1360	3600
11	---	---	---	20600	9960	14300	840	320	476	7160	1600	3360
12	---	---	---	14800	7760	10500	440	320	377	7240	1520	2890
13	---	---	---	17400	7800	11600	440	320	378	6040	1400	2990
14	---	---	---	18600	9600	13600	800	320	415	6960	1360	2910
15	---	---	---	12000	8040	9780	1120	200	443	5760	1240	2680
16	---	---	---	11600	7200	8730	440	320	408	6040	1360	2780
17	---	---	---	12000	6840	---	720	200	---	6800	1400	2740
18	---	---	---	---	---	---	440	200	344	5960	1640	2920
19	---	---	---	9200	5600	---	360	200	284	4840	1600	2570
20	---	---	---	12000	4800	6720	560	160	292	5400	1560	2530
21	---	---	---	11200	5600	7750	320	200	301	5120	1800	3140
22	---	---	---	---	---	---	---	---	---	---	---	---
23	---	---	---	---	---	---	---	---	---	---	---	---
24	---	---	---	---	---	---	---	---	---	---	---	---
25	---	---	---	---	---	---	5200	840	---	---	---	---
26	16000	11400	---	---	---	---	6200	960	2750	---	---	---
27	20400	11100	15200	---	---	---	5760	1360	3130	11600	3800	7200
28	17800	11200	13500	---	---	---	6840	1400	3780	11800	3800	6900
29	16600	10400	12700	---	---	---	6840	1400	3840	12700	4400	7160
30	---	---	---	---	---	---	5560	1400	2870	13000	4720	7730
31	---	---	---	---	---	---	---	---	---	12600	5120	7680
MONTH	20400	3600	11900	20600	4800	12000	6840	160	1340	13000	760	3620

01482800 DELAWARE RIVER AT REEDY ISLAND JETTY, DE--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	12600	4960	7710	15100	7600	10100	15200	8160	10700	16800	10400	12700
2	12800	5120	7730	15400	7640	10500	14000	7960	10200	15800	9120	11900
3	12000	5360	7800	14000	7400	9650	[illegible]	7800	9700	16000	9200	11400
4	12400	4800	7460	14000	7360	9800	16300	7760	10600	17000	9240	12100
5	12400	5000	8220	14400	7640	10500	16000	8720	11100	16800	10000	12600
6	13600	5600	8880	13500	7600	9790	15400	8400	10700	17000	10200	12500
7	13000	5760	8870	14700	7400	10000	16000	8000	10200	16200	10000	12400
8	14400	5800	8780	13000	8000	10100	15800	8000	10700	17000	10600	13100
9	13400	5120	8320	15200	7160	9610	16000	7600	10300	17200	10800	13200
10	13100	5520	8120	15200	7200	9970	16200	7760	10500	16800	9600	12400
11	12800	5600	7850	15500	7760	10400	16400	8160	11200	16000	9640	12400
12	12800	5520	7870	15900	8200	10600	16000	8320	10800	16200	9920	12300
13	13200	5600	7920	15100	8320	10700	15600	8200	11000	16200	10200	12800
14	13600	5800	8310	15600	8320	11000	16000	8760	11600	16400	10800	13200
15	13900	6160	9190	15800	8800	11200	15600	8400	11100	15100	11100	12700
16	13400	6160	8310	14300	7800	10200	15200	8040	10500	21000	11800	15700
17	12800	6000	8450	---	---	---	15800	8160	12000	19900	14400	17000
18	14300	6600	9520	---	---	---	17600	9560	13000	18800	12300	14800
19	13200	6800	9550	---	---	---	17200	9360	12700	18800	11900	14600
20	14000	7200	9820	---	---	---	17800	9200	12800	19900	11800	15000
21	13200	6160	9050	13600	6720	---	18600	10600	13900	19000	12000	14500
22	13600	6160	9430	14200	6840	9800	19600	11500	15200	19400	11200	14000
23	15200	6400	9780	15000	6600	9810	19400	11400	14700	19200	11400	14300
24	14400	6560	9590	15800	6800	9540	18400	11400	13900	20400	11800	15000
25	14000	6000	9000	17000	7160	10500	18700	11200	13800	21200	13100	16400
26	14700	6000	9000	16200	7600	10500	18800	11200	13900	19600	12400	15900
27	15200	6560	9950	16000	7800	10400	18800	11200	14100	17800	11900	14100
28	14400	6800	9560	15200	7800	10500	[illegible]	11200	14000	19200	12000	14300
29	16400	7240	10400	16000	8000	10800	18200	11600	14200	20400	12000	15000
30	15000	7560	10200	15600	7920	10900	17800	11600	14300	20000	13600	16300
31	---	---	---	14800	7960	10500	17000	11800	14100	---	---	---
MONTH	16400	4800	8820	17000	6600	10300	19600	7600	12200	21200	9120	13800
YEAR	21200	160	7450									

OXYGEN, DISSOLVED (DO), MG/L, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	8.8	7.8	8.4	---	---	---	11.6	10.8	11.2
2	---	---	---	8.8	8.0	8.5	---	---	---	11.5	10.8	11.1
3	6.8	5.9	6.4	8.8	8.2	8.5	---	---	---	11.6	10.8	11.2
4	6.5	5.6	6.1	9.0	8.1	8.6	---	---	---	11.6	11.0	11.3
5	6.7	5.6	6.3	9.0	8.0	8.5	9.8	9.4	---	11.9	11.4	11.7
6	6.7	5.8	6.4	8.8	7.7	8.3	9.7	9.3	9.5	12.1	11.5	11.8
7	6.9	6.0	6.6	8.6	7.7	8.1	9.7	9.3	9.5	12.0	11.6	11.9
8	7.4	6.4	6.9	8.7	7.6	8.3	11.0	9.5	10.1	11.9	11.6	11.7
9	7.8	6.5	7.2	8.8	7.7	8.2	10.7	9.8	10.3	11.9	11.6	11.7
10	7.8	7.0	7.6	8.6	7.6	8.1	10.8	10.0	10.3	12.0	11.5	11.8
11	7.7	7.0	7.4	8.8	7.8	8.3	10.6	10.2	10.3	12.1	11.6	11.9
12	7.6	6.8	7.3	9.2	8.3	8.7	10.9	10.2	10.5	12.4	11.6	11.9
13	7.4	6.8	7.2	9.2	8.4	8.9	11.0	10.6	10.8	12.4	11.5	11.9
14	7.6	6.6	7.3	9.2	8.4	8.8	11.2	10.7	10.9	12.2	11.7	12.0
15	7.9	7.2	7.6	9.2	8.6	9.0	11.2	10.8	11.0	12.2	11.8	12.0
16	8.0	7.4	7.7	9.3	8.8	9.0	11.2	10.5	10.9	12.2	11.6	12.0
17	7.8	7.3	7.6	9.4	8.9	9.1	13.6	10.7	11.3	12.2	11.6	11.9
18	7.6	7.0	7.3	9.4	8.8	9.1	11.6	11.0	11.4	12.1	11.5	11.8
19	7.5	6.8	7.2	9.3	8.8	9.1	11.7	11.2	11.5	11.9	11.4	11.7
20	7.5	6.8	7.2	9.3	8.7	9.0	12.0	11.6	11.8	11.9	11.4	11.6
21	7.4	6.6	7.0	9.2	8.5	8.9	12.1	11.8	12.0	11.9	11.3	11.6
22	7.2	6.4	6.8	9.2	8.4	8.8	12.1	11.6	11.9	11.7	11.3	11.5
23	7.4	6.6	6.9	9.0	8.4	8.7	12.0	11.4	11.8	11.7	11.3	11.5
24	7.6	6.8	7.3	8.9	8.4	8.7	11.9	11.3	11.7	11.7	11.2	11.5
25	7.8	7.2	7.6	9.0	8.4	8.7	11.9	11.4	11.7	11.8	11.4	11.5
26	8.0	7.5	7.8	9.2	8.6	9.0	11.8	11.4	11.6	11.6	11.4	11.5
27	8.4	7.8	8.1	9.0	8.6	8.8	11.8	11.4	11.5	11.8	11.4	11.6
28	8.5	7.8	8.2	9.4	8.5	8.8	11.9	11.3	11.6	11.8	11.4	11.6
29	8.4	7.8	8.1	---	---	---	12.2	11.4	11.7	11.9	11.4	11.7
30	8.6	7.8	8.1	---	---	---	11.8	11.2	11.4	12.1	11.6	11.9
31	8.6	7.8	8.2	---	---	---	11.6	11.0	11.3	12.3	11.8	12.1
MONTH	8.6	5.6	7.3	9.4	7.6	8.7	13.6	9.3	11.1	12.4	10.8	11.7

01482800 DELAWARE RIVER AT REEDY ISLAND JETTY, DE --Continued

OXYGEN, DISSOLVED (DO), MG/L, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	12.7	12.1	12.4	---	---	---	---	---	---	7.2	6.7	6.9
2	---	---	---	---	---	---	---	---	---	7.2	6.8	7.0
3	---	---	---	---	---	---	---	---	---	7.1	6.7	6.9
4	---	---	---	---	---	---	---	---	---	7.2	6.6	6.9
5	---	---	---	---	---	---	---	---	---	7.0	6.5	6.8
6	---	---	---	---	---	---	---	---	---	8.0	6.9	7.4
7	---	---	---	---	---	---	---	---	---	7.6	7.0	7.3
8	---	---	---	---	---	---	---	---	---	7.3	6.6	6.9
9	---	---	---	---	---	---	---	---	---	7.5	6.4	7.0
10	---	---	---	13.3	12.4	---	9.8	9.4	---	7.8	6.8	7.3
11	---	---	---	13.2	11.8	12.4	9.4	9.0	9.2	7.9	7.3	7.5
12	---	---	---	12.2	11.6	11.9	9.2	8.8	8.9	8.8	7.3	7.8
13	---	---	---	12.3	11.6	11.9	8.9	8.6	8.8	8.4	7.9	8.1
14	---	---	---	12.3	11.6	12.0	8.8	8.5	8.7	8.3	7.8	8.0
15	---	---	---	12.6	10.6	11.7	8.9	8.5	8.7	8.6	7.8	8.1
16	---	---	---	12.7	11.4	11.7	9.2	8.6	8.9	8.5	7.8	8.1
17	---	---	---	12.0	11.4	---	9.1	8.0	---	8.4	7.7	8.1
18	---	---	---	---	---	---	8.9	8.5	8.7	8.4	7.9	8.2
19	---	---	---	12.0	11.3	---	8.6	8.1	8.4	8.4	7.8	8.1
20	---	---	---	12.1	11.1	11.5	8.2	7.5	7.9	8.2	7.6	7.8
21	---	---	---	11.9	10.9	11.3	7.8	7.6	7.7	7.9	7.6	7.7
22	---	---	---	---	---	---	---	---	---	---	---	---
23	---	---	---	---	---	---	---	---	---	---	---	---
24	---	---	---	---	---	---	---	---	---	---	---	---
25	---	---	---	---	---	---	7.8	7.4	---	---	---	---
26	---	---	---	---	---	---	7.7	7.2	7.4	---	---	---
27	---	---	---	---	---	---	7.9	7.1	7.4	7.8	7.2	7.6
28	---	---	---	---	---	---	8.1	7.5	7.8	8.0	7.2	7.5
29	---	---	---	---	---	---	8.0	6.8	7.4	8.0	7.3	7.6
30	---	---	---	---	---	---	6.9	6.5	6.7	8.2	7.2	7.6
31	---	---	---	---	---	---	---	---	---	7.9	7.1	7.5
MONTH	12.7	12.1	12.4	13.3	10.6	11.8	9.8	6.5	8.2	8.8	6.4	7.5

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	7.7	6.9	7.3	7.1	6.2	6.5	6.0	5.4	5.7	6.1	5.4	5.7
2	7.6	6.8	7.2	6.8	6.2	6.4	6.2	5.4	5.7	6.2	5.4	5.7
3	7.4	6.7	7.0	6.4	5.8	6.2	6.0	5.5	5.8	6.0	5.3	5.7
4	7.2	6.5	6.8	6.3	5.7	6.0	6.3	5.5	5.9	6.6	5.3	5.8
5	6.8	6.2	6.5	6.2	5.6	5.9	6.4	5.6	5.9	6.3	5.5	5.9
6	6.5	5.9	6.2	6.4	5.6	6.0	6.4	5.5	5.9	6.8	5.5	6.0
7	6.3	5.7	6.1	6.4	5.8	6.0	6.4	5.5	5.9	6.5	5.7	6.1
8	6.1	5.0	5.7	6.4	5.7	6.0	6.2	5.4	5.9	7.2	5.8	6.2
9	6.6	5.2	6.1	6.4	5.6	6.0	6.2	5.4	5.8	6.9	5.8	6.2
10	7.6	6.6	7.1	6.4	5.8	6.1	6.8	5.4	5.9	6.6	5.7	6.1
11	8.0	6.9	7.4	6.3	5.6	5.9	6.6	5.4	5.9	6.6	5.8	6.1
12	7.9	7.1	7.4	6.4	5.7	6.0	6.3	5.4	5.8	6.8	5.8	6.1
13	7.8	7.0	7.4	6.6	5.8	6.1	6.6	5.5	5.9	6.6	5.9	6.2
14	8.0	7.0	7.3	6.8	5.8	6.1	7.2	5.7	6.2	6.5	5.9	6.1
15	7.4	6.8	7.2	6.6	5.9	6.2	6.7	5.6	6.0	6.3	5.8	6.0
16	7.2	7.0	---	6.6	6.0	6.2	6.6	5.5	6.0	6.7	5.9	6.2
17	---	---	---	---	---	---	6.9	5.8	6.2	6.9	6.1	6.5
18	---	---	---	---	---	---	6.4	5.8	6.0	6.9	6.2	6.5
19	---	---	---	---	---	---	6.2	5.7	5.9	7.0	6.2	6.5
20	---	---	---	---	---	---	6.4	5.6	6.0	6.9	6.2	6.5
21	---	---	---	6.5	5.4	---	6.6	5.7	6.1	6.6	6.3	6.5
22	---	---	---	6.3	5.1	5.7	6.7	5.8	6.2	6.6	6.1	6.4
23	7.9	7.0	---	6.1	5.6	5.8	6.6	5.8	6.2	6.6	6.2	6.3
24	7.4	6.9	7.2	6.6	5.6	6.0	6.8	5.9	6.2	6.9	6.2	6.5
25	7.2	6.7	6.9	6.6	5.6	6.0	6.7	5.9	6.1	6.7	6.2	6.5
26	7.0	6.5	6.7	6.6	5.1	5.9	6.9	5.8	6.1	7.0	6.3	6.5
27	6.8	6.2	6.5	6.4	4.4	5.9	6.2	4.7	5.5	7.1	6.4	6.8
28	7.0	6.2	6.5	6.6	6.0	6.2	5.9	4.6	5.0	7.2	6.6	6.8
29	6.6	6.1	6.4	6.4	5.6	6.1	6.4	5.6	5.9	7.0	6.2	6.7
30	6.7	6.2	6.4	6.2	5.7	5.9	6.2	5.6	5.8	6.9	6.4	6.7
31	---	---	---	6.0	5.5	5.7	6.0	5.6	5.7	---	---	---
MONTH	8.0	5.0	6.8	7.1	4.4	6.0	7.2	4.6	5.9	7.2	5.3	6.3

01482800 DELAWARE RIVER AT REEDY ISLAND JETTY, DE --Continued

PH (STANDARD UNITS), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	---	---	---	7.3	6.8	7.1	---	---	---	7.4	6.9	7.1
2	---	---	---	7.4	6.8	7.1	---	---	---	7.4	6.9	7.1
3	7.2	6.7	6.9	7.3	6.9	7.0	---	---	---	7.4	6.9	7.1
4	7.2	6.7	6.9	7.4	6.8	7.1	---	---	---	7.3	6.9	7.0
5	7.2	6.7	6.9	7.3	6.8	7.0	7.2	6.7	---	7.4	7.0	7.2
6	7.1	6.7	6.9	7.3	6.7	7.0	7.0	6.6	6.8	7.5	7.1	7.3
7	7.0	6.7	6.8	7.1	6.7	6.9	7.1	6.6	6.8	7.5	7.1	7.3
8	6.9	6.6	6.8	7.3	6.6	6.9	6.9	6.6	6.8	7.2	7.0	7.1
9	6.9	6.6	6.8	7.2	6.7	6.9	7.1	6.6	6.8	7.3	7.0	7.1
10	7.0	6.7	6.8	7.1	6.6	6.9	7.1	6.7	6.8	7.3	7.0	7.1
11	7.0	6.6	6.8	7.1	6.7	6.9	7.2	6.7	6.9	7.4	7.0	7.2
12	6.9	6.6	6.7	7.3	6.8	7.0	7.1	6.7	6.9	7.3	7.0	7.1
13	6.8	6.5	6.6	7.3	6.9	7.1	7.2	6.7	6.9	7.2	6.9	7.1
14	7.1	6.5	6.7	7.4	6.9	7.1	7.3	6.7	7.1	7.5	7.0	7.2
15	7.2	6.6	6.9	7.4	6.9	7.2	7.3	6.9	7.1	7.5	7.1	7.3
16	7.2	6.6	6.9	7.3	6.9	7.1	7.4	6.9	7.1	7.6	7.1	7.3
17	7.2	6.7	7.0	7.4	6.9	7.1	7.3	6.9	7.0	7.5	7.1	7.3
18	7.2	6.7	7.0	7.3	6.9	7.1	7.4	6.9	7.1	7.5	7.1	7.3
19	7.1	6.7	6.9	7.4	6.9	7.1	7.5	7.0	7.2	7.3	7.0	7.2
20	7.1	6.7	6.9	7.4	6.9	7.1	7.5	7.1	7.3	7.3	7.0	7.1
21	7.1	6.7	6.9	7.3	6.9	7.1	7.5	7.1	7.3	7.3	6.9	7.1
22	7.0	6.7	6.8	7.3	6.9	7.1	7.5	7.1	7.3	7.2	6.9	7.0
23	7.1	6.7	6.9	7.3	6.9	7.0	7.5	7.1	7.3	7.3	6.9	7.1
24	7.1	6.7	6.9	7.2	6.9	7.0	7.4	7.1	7.2	7.2	6.9	7.1
25	7.1	6.7	6.9	7.2	6.9	7.0	7.4	7.1	7.3	7.3	7.0	7.1
26	7.2	6.8	6.9	7.3	7.0	7.1	7.3	7.1	7.2	7.2	7.0	7.1
27	7.3	6.8	7.0	7.1	6.9	7.0	7.4	7.0	7.1	7.3	6.9	7.1
28	7.3	6.8	7.0	7.1	6.7	6.9	7.3	7.0	7.1	7.4	7.0	7.1
29	7.2	6.8	7.0	---	---	---	7.2	6.9	7.1	7.4	7.0	7.1
30	7.3	6.8	7.0	---	---	---	7.4	6.9	7.1	7.3	6.9	7.1
31	7.3	6.8	7.0	---	---	---	7.4	6.9	7.1	7.4	7.0	7.2
MONTH	7.3	6.5	6.9	7.4	6.6	7.0	7.5	6.6	7.1	7.6	6.9	7.2

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	7.5	7.1	7.3	8.2	7.8	8.0	---	---	---	7.0	6.6	6.8
2	---	---	---	8.1	7.9	---	---	---	---	7.1	6.5	6.8
3	---	---	---	---	---	---	---	---	---	7.1	6.5	6.8
4	---	---	---	8.9	8.1	---	---	---	---	7.0	6.5	6.7
5	---	---	---	8.5	8.1	8.3	---	---	---	7.0	6.5	6.7
6	---	---	---	8.5	8.1	8.3	---	---	---	7.1	6.6	6.8
7	---	---	---	8.5	8.1	8.3	---	---	---	7.1	6.6	6.8
8	---	---	---	8.6	8.1	8.3	---	---	---	7.1	6.6	6.8
9	---	---	---	8.5	8.1	8.3	---	---	---	7.2	6.6	6.9
10	---	---	---	8.6	8.1	8.3	6.6	6.4	---	7.3	6.7	6.9
11	---	---	---	8.4	7.9	8.1	6.5	6.3	6.4	7.3	6.8	7.0
12	---	---	---	8.2	7.8	8.0	6.5	6.3	6.4	7.3	6.8	6.9
13	---	---	---	8.4	7.8	8.0	6.5	6.3	6.4	7.2	6.8	7.0
14	---	---	---	8.4	7.9	8.2	6.5	6.3	6.4	7.3	6.8	7.0
15	---	---	---	8.2	7.8	8.0	6.6	6.4	6.5	7.2	6.8	7.0
16	---	---	---	8.2	7.8	7.9	6.5	6.4	6.5	7.3	6.9	7.1
17	---	---	---	8.3	7.8	---	6.5	6.3	6.4	7.3	6.9	7.1
18	---	---	---	---	---	---	6.5	6.4	6.4	7.3	7.0	7.1
19	7.6	7.4	---	7.9	7.5	---	6.5	6.4	6.4	7.2	6.9	7.1
20	8.0	7.4	7.7	8.1	7.5	7.7	6.5	6.4	6.4	7.2	6.9	7.0
21	8.0	7.7	7.8	8.1	7.6	7.8	6.4	6.4	6.4	7.2	7.0	7.1
22	8.0	7.7	7.8	---	---	---	---	---	---	---	---	---
23	8.0	7.7	7.8	---	---	---	---	---	---	---	---	---
24	8.0	7.7	7.8	---	---	---	---	---	---	---	---	---
25	8.0	7.6	7.8	---	---	---	7.0	6.6	---	---	---	---
26	8.1	7.7	7.9	---	---	---	7.1	6.6	6.8	---	---	---
27	8.3	7.8	8.1	---	---	---	7.1	6.6	6.8	7.6	7.2	7.4
28	8.3	7.9	8.0	---	---	---	7.2	6.7	6.9	7.6	7.1	7.3
29	8.2	7.8	8.0	---	---	---	7.1	6.7	6.9	7.6	7.1	7.3
30	---	---	---	---	---	---	7.0	6.7	6.8	7.6	7.1	7.4
31	---	---	---	---	---	---	---	---	---	7.6	7.2	7.4
MONTH	8.3	7.1	7.8	8.9	7.5	8.1	7.2	6.3	6.6	7.6	6.5	7.0

01482800 DELAWARE RIVER AT REEDY ISLAND JETTY, DE --Continued

PH (STANDARD UNITS), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	7.6	7.1	7.3	7.5	7.3	7.4	7.5	7.4	7.5	7.6	7.5	7.5
2	7.6	7.1	7.3	7.5	7.3	7.4	7.6	7.4	7.5	7.6	7.5	7.5
3	7.5	7.1	7.3	7.5	7.2	7.3	7.6	7.5	7.5	7.6	7.5	7.5
4	7.6	7.2	7.3	7.4	7.2	7.3	7.6	7.5	7.5	7.7	7.5	7.6
5	7.6	7.2	7.4	7.5	7.2	7.3	7.6	7.5	7.5	7.7	7.5	7.6
6	7.6	7.2	7.4	7.5	7.2	7.3	7.6	7.5	7.5	7.8	7.5	7.6
7	7.6	7.3	7.4	7.5	7.3	7.4	7.6	7.4	7.5	7.7	7.5	7.6
8	7.6	7.2	7.4	7.5	7.3	7.4	7.7	7.4	7.5	7.9	7.6	7.7
9	7.7	7.2	7.5	7.6	7.3	7.4	7.7	7.4	7.5	7.8	7.6	7.7
10	7.6	7.2	7.4	7.5	7.3	7.4	7.7	7.5	7.6	7.7	7.5	7.6
11	7.6	7.2	7.4	7.5	7.3	7.4	7.7	7.5	7.6	7.7	7.5	7.6
12	7.6	7.2	7.4	7.5	7.3	7.4	7.7	7.5	7.5	7.8	7.5	7.6
13	7.6	7.2	7.4	7.5	7.3	7.4	7.7	7.5	7.6	7.7	7.6	7.6
14	7.6	7.2	7.4	7.5	7.3	7.4	7.8	7.5	7.6	7.7	7.6	7.6
15	7.6	7.2	7.4	7.5	7.3	7.4	7.8	7.5	7.6	7.6	7.6	7.6
16	7.5	7.2	7.3	7.5	7.4	7.4	7.7	7.5	7.6	7.6	7.4	7.5
17	7.5	7.2	7.3	---	---	---	7.8	7.5	7.7	7.5	7.4	7.5
18	7.5	7.3	7.4	---	---	---	7.8	7.5	7.6	7.5	7.4	7.4
19	7.5	7.3	7.4	---	---	---	7.7	7.5	7.6	7.5	7.4	7.4
20	7.5	7.4	7.4	---	---	---	7.8	7.5	7.6	7.5	7.4	7.4
21	7.6	7.4	7.5	7.5	7.2	---	7.8	7.5	7.6	7.4	7.4	7.4
22	7.7	7.3	7.5	7.5	7.2	7.4	7.7	7.6	7.6	7.5	7.3	7.4
23	7.7	7.3	7.5	7.6	7.4	7.4	7.7	7.5	7.6	7.4	7.3	7.4
24	7.6	7.3	7.4	7.6	7.4	7.5	7.7	7.5	7.6	7.5	7.3	7.4
25	7.5	7.3	7.4	7.6	7.4	7.5	7.7	7.5	7.6	7.4	7.4	7.4
26	7.6	7.3	7.4	7.6	7.4	7.5	7.7	7.5	7.6	7.4	7.3	7.4
27	7.5	7.3	7.4	7.6	7.4	7.5	7.6	7.5	7.5	7.4	7.3	7.4
28	7.5	7.2	7.4	7.6	7.5	7.5	7.6	7.5	7.5	7.4	7.3	7.4
29	7.5	7.3	7.4	7.6	7.5	7.5	7.6	7.4	7.5	7.5	7.3	7.4
30	7.5	7.3	7.4	7.6	7.4	7.5	7.6	7.5	7.5	7.5	7.4	7.5
31	---	---	---	7.5	7.4	7.5	7.6	7.5	7.5	---	---	---
MONTH	7.7	7.1	7.4	7.6	7.2	7.4	7.8	7.4	7.6	7.9	7.3	7.5
YEAR	8.9	6.3	7.3									

RESERVOIRS IN DELAWARE RIVER BASIN

01416900 PEPACTON RESERVOIR.--Lat 42°04'38", long 74°58'04", Delaware County, NY, Hydrologic Unit 02040102, near release chamber at Downsville Dam on East Branch Delaware River, and 1.6 mi (2.6 km) east of Downsville, NY. DRAINAGE AREA, 371 mi^2 (961 km^2). PERIOD OF RECORD, September 1954 to current year. GAGE, water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Board of Water Supply, City of New York).

Reservoir is formed by an earthfill rockfaced dam; storage began Sept. 15, 1954. Usable capacity 140,190 mil gal (530.6 hm^3) between minimum operating level, elevation, 1,152.0 ft (351.13 m) and crest of spillway, elevation, 1,280.0 ft (390.14 m). Capacity: at crest of spillway 149,700 mil gal (566.6 hm^3); at minimum operating level, 9,609 mil gal (36.37 hm^3); at still of diversion tunnel, elevation, 1,143.0 ft (348.39 m), 6,098 mil gal (23.08 hm^3); in dead storage below release outlet, elevation, 1,126.50 ft (343.357 m), 1,898 mil gal (7.184 hm^3). Figures given herein represent total contents. Reservoir impounds water for diversion through East Delaware Tunnel to Rondout Reservoir on Rondout Creek, in Hudson River basin (see Delaware River Basin, diversions), for water supply to City of New York; for release during periods of low flow in the lower Delaware River basin, as directed by the Delaware River Master; and for conservation release. No diversion prior to Jan. 6, 1955. Records furnished by Bureau of Water Resources Development and Department of Environmental Protection, City of New York.

EXTREMES FOR PERIOD OF RECORD: Maximum contents observed, 154,027 mil gal (583.0 hm^3) Apr. 5, 1960, elevation, 1,282.27 ft (390.836 m); minimum observed (after first filling), 9,575 mil gal (36.24 hm^3) Dec. 26, 1964, elevation, 1,151.92 ft (351.105 m).

EXTREMES FOR CURRENT YEAR: Maximum contents observed, 151,374 mil gal (573.0 hm^3) Apr. 13, elevation, 1,280.85 ft (390.403 m); minimum observed, 96,318 mil gal (364.6 hm^3) Sept. 30, elevation, 1,247.35 ft (380.192 m).

01424997 CANNONSVILLE RESERVOIR.--Lat 42°03'46", long 75°22'29", Delaware County, NY, Hydrologic Unit 02040101, in emergency gate tower at Cannonsville Dam on West Branch Delaware River, and 1.8 mi (2.9 km) southeast of Stilesville, NY. DRAINAGE AREA, 454 mi^2 (1,176 km^2). PERIOD OF RECORD, October 1963 to current year. REVISED RECORDS, WRD-NY 1972: 1966. GAGE, water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Board of Water Supply, City of New York).

Reservoir is formed by an earthfill rockfaced dam; storage began Sept. 30, 1963, usable capacity 95,706 mil gal (362.2 hm^3) between minimum operating level, elevation, 1,040.0 ft (316.99 m) and crest of spillway, elevation, 1,150.0 ft (350.52 m). Capacity, at crest of spillway, 98,618 mil gal (373.3 hm^3); at minimum operating level, 2,912 mil gal (11.02 hm^3); at mouth of inlet channel to diversion tunnel, elevation, 1,035.0 ft (315.47 m), 1,892 mil gal (7.161 hm^3); in dead storage below release outlet elevation, 1,020.5 ft (311.05 m), 328 mil gal (1.241 hm^3). Figures given herein represent total contents. Impounded water is diverted for New York City water supply via West Delaware Tunnel to Rondout Reservoir in Hudson River basin (see Delaware River Basin, diversion); is released in Delaware River for downstream low flow augmentation as directed by Delaware River Master; and is released for conservation flow in the Delaware River. No diversion prior to Jan. 29. 1964. Records furnished by Bureau of Water Resources Development, City of New York.

EXTREMES FOR PERIOD OF RECORD: Maximum contents observed, 108,116 mil gal (409.2 hm^3) Mar. 15, 1977, elevation, 1,155.85 ft (352.303 m); minimum observed (after first filling), 11,901 mil gal (45.05 hm^3) Nov. 7, 1968, elevation, 1,066.24 ft (324.990 m).

EXTREMES FOR CURRENT YEAR: Maximum contents, 102,368 mil gal (387.5 hm^3) Apr. 1, elevation, 1,152.33 ft (351.230 m); minimum, 41,356 mil gal (156.5 hm^3) Sept. 30, elevation, 1,105.21 ft (336.868 m).

01428900 PROMPTON RESERVOIR.--Lat 41°35'18", long 75°19'39", Wayne County, PA, Hydrologic Unit 02040103, at dam on West Branch Lackawaxen River, 0.3 mi (0.5 km) north of Prompton, 0.4 mi (0.6 km) upstream from highway bridge and 0.5 mi (0.8 km) upstream from Van Auken Creek. DRAINAGE AREA, 59.6 mi^2 (154 km^2). PERIOD OF RECORD, December 1960 to current year. GAGE, water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers).

Reservoir formed by an earth and rockfill dam with ungaged bedrock spillway at elevation 1,205.00 ft (367.284 m); storage began July 1960. Capacity at elevation 1,205.00 ft (367.284 m) is 51,700 acre-ft (63.7 hm^3). Ordinary minimum (conservation) pool elevation, 1,125.00 ft (342.900 m) capacity, 3,420 acre-ft (4.22 hm^3). Reservoir is used for flood control and recreation. Figures given herein represent total contents. Regulation is accomplished by discharge through an ungated tunnel. Records furnished by Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD: Maximum contents, 8,170 acre-ft (10.1 hm^3) June 29, 1973, elevation, 1,138.40 ft (346.984 m); minimum (after first filling), 2,920 acre-ft (3.60 hm^3) Sept. 27, 1964, elevation, 1,123.20 ft (342.351 m).

EXTREMES FOR CURRENT YEAR: Maximum contents, 4,770 acre-ft (5.88 hm^3) Mar. 22, elevation, 1,129.48 ft (344.265 m); minimum, 3,450 acre-ft (4.25 hm^3) Sept. 15, elevation, 1,125.10 ft (342.930 m).

01429400 GENERAL EDGAR JADWIN RESERVOIR.--Lat 41°36'44", long 75°15,55", Wayne County, PA, Hydrologic Unit 02040103, at dam on Dyberry Creek, 0.45 mi (0.72 km) upstream from unnamed tributary, 2.4 mi (3.9 km) north of Honesdale, and 2.9 mi (4.7 km) upstream from mouth. DRAINAGE AREA, 64.5 mi^2 (167.1 km^2). PERIOD OF RECORD, October 1959 to current year. GAGE, water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers).

Reservoir formed by an earth and rockfill dam with ungated, concrete spillway at elevation, 1,053.00 ft (320.954 m); storage began in October 1959. Capacity at elevation 1,053.00 ft (320.954 m) is 24,500 acre-ft (30.2 hm^3). Reservoir is used for flood control. Figures given herein represent total contents. Regulation is accomplished by discharge through an ungated tunnel. Records furnished by Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD: Maximum contents, 6,520 acre-ft (8.04 hm^3) June 19, 1973, elevation 1,017.40 ft (310.104 m); no storage many times.

EXTREMES FOR CURRENT YEAR: Maximum contents, 4,300 acre-ft (5.30 hm^3) Mar. 23, elevation, 988.00 ft (301.142 m); no storage many times.

01431700 LAKE WALLENPAUPACK.--Lat 41°27'35", long 75°11'10", Wayne County, PA, Hydrologic Unit 02040103, at dam on Wallenpaupack Creek at Wilsonville, 1.2 mi (1.9 km) south of Hawley and 1.5 mi (2.4 km) upstream from mouth. DRAINAGE AREA, 228 mi^2 (591 km^2). PERIOD OF RECORD, January 1926 to current year. GAGE, vertical staff. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Pennsylvania Power and Light Co.).

Reservoir formed by concrete gravity-type and earthfill dam with concrete spillway at elevation 1,176.00 ft (358.445 m) in two sections. Spillway equipped with roller gate, 14 ft high (4.267 m) on each section. Storage began Nov. 3, 1925; water in reservoir first reached minimum pool elevation in January 1926. Total capacity at elevation 1,190.00 ft (362.712 m), top of gates, is 209,300 acre-ft (258 hm^3) of which 157,800 acre-ft (195 hm^3) is controlled storage above elevation 1,160.00 ft (353.568 m), minimum pool. Reservoir is used for generation of hydrolelectric power. Figures given herein represent usable contents. Records furnished by Pennsylvania Power and Light Co.

EXTREMES FOR PERIOD OF RECORD: Maximum contents, 178,200 acre-ft (220 hm^3) Aug. 19-21, 1955, elevation, 1,193.45 ft (363.764 m); minimum (after first filling), 12,280 acre-ft (15.1 hm^3) Mar. 28, 1958, elevation, 1,162.60 ft (354.360 m).

EXTREMES FOR CURRENT YEAR: Maximum contents, 137,080 acre-ft (169.0 hm^3) Jun. 8, elevation, 1,186.40 ft (361.615 m); minimum, 69,600 acre-ft (85.8 hm^3) Sept. 30, elevation, 1,174.00 ft (357.875 m).

RESERVOIR IN DELAWARE RIVER BASIN--Continued

01433000 SWINGING BRIDGE RESERVOIR.--Lat 41°34'25", long 74°47'00", Sullivan County, NY, Hydrologic Unit 02040104, at dam on Mongaup River, and 1.8 mi (2.9 km) northwest of Fowlersville, NY. DRAINAGE AREA, 118 mi^2 (306 km^2) excluding Cliff Lake, Lebanon Lake, and Toronto Reservoir. PERIOD OF RECORD, January 1930 to current year. REVISED RECORDS, WSP 1552: 1951-54. GAGE, water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Orange and Rockland Utilities, Inc.). All capacity figures given herein are based on zero storage at minimum operating pool level, 1,010 ft (308 m).

Reservoir is formed by an earthfill dam; storage began Jan. 19, 1930. Usable capacity, 1,436.6 mil ft^3 (40.7 hm^3) between elevations 1,010.0 ft (307.85 m), minimum operating pool, and 1,071.2 ft (326.50 m), top of flashboards. Capacity below elevation 1,010.0 ft (307.85 m), minimum operating pool, about 212.7 mil ft^3 (6.02 hm^3). Reservoir is used for storage of water for power. Figures given herein represent contents above 1,010.0 ft (307.85 m). Water is received from Cliff Lake, Lebanon Lake, and Toronto Reservoir. Records furnished by Orange and Rockland Utilities, Inc.

EXTREMES FOR PERIOD OF RECORD: Maximum contents, 1,461.6 mil ft^3 (41.4 hm^3) Mar. 14, 1977, elevation, 1,071.8 ft (326.68 m); minimum (after first filling), 141.4 mil ft^3 (4.00 hm^3) Dec. 2, 1938, elevation, 987.5 ft (300.99 m).

EXTREMES FOR CURRENT YEAR: Maximum contents, 1,387 mil ft^3 (39.3 hm^3) Oct. 10, elevation, 1,070.0 ft (326.14 m); minimum, 1,014 mil ft^3 (28.7 hm^3) Sept. 30, elevation, 1,060.1 ft (323.12 m).

01433100 TORONTO RESERVOIR.--Lat 41°37'15", long 74°49'55", Sullivan County, NY, Hydrologic Unit 02040104, at dam on Black Lake Creek, and 2.5 mi (4.0 km) southeast of village of Black Lake, NY. DRAINAGE AREA, 23.2 mi^2 (60.1 km^2). PERIOD OF RECORD, January 1926 to current year. REVISED RECORDS, WSP 1552: 1951-54. WSP 1702: 1959(M). Nonrecording gage. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Orange and Rockland Utilities, Inc.). All capacity figures given herein are based on zero storage at minimum operating pool level, 1,165.0 ft (355.09 m).

Reservoir is formed by an earthfill dam completed July 24, 1926; storage began Jan. 13, 1926. Usable capacity, 1,098.2 mil ft^3 (31.1 hm^3) between elevations 1,165.0 ft (355.09 m), minimum operating pool, and operating pool, about 26.8 mil ft^3 (0.759 hm^3). Reservoir is used for storage of water for power. Figures given herein represent contents above 1,165.0 ft (355.09 m). Records furnished by Orange and Rockland Utilities, Inc.

EXTREMES FOR PERIOD OF RECORD: Maximum contents observed, 1,171.2 mil ft^3 (33.2 hm^3) July 20, 1945, elevation, 1,222.0 ft (372.47 m). minimum observed (after first filling), -26.8 mil ft^3 (0.759 hm^3) Nov. 15, 1928, elevation, 1,144.5 ft (348.84 m).

EXTREMES FOR CURRENT YEAR: Maximum contents observed, 753 mil ft^3 (21.3 hm^3) June 9, elevation, 1,209.0 ft (368.50 m); minimum observed, 49.2 mil ft^3 (1.39 hm^3) Aug. 29, elevation, 1,173.1 ft (357.56 m).

01433200 CLIFF LAKE.--Lat 41°35'00", long 74°47'40", Sullivan County, NY, Hydrologic Unit 02040104, at dam on Black Lake Creek, and 2.5 mi (4.0 km) northwest of Fowlersville, NY. DRAINAGE AREA, 6.46 mi^2 (16.7 km^2) excluding area above Toronto Reservoir. PERIOD OF RECORD, January 1939 to current year. REVISED RECORDS, WSP 1552: 1951-54. WRD-NY 1975: 1974(m). Nonrecording gage. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Orange and Rockland Utilities, Inc.). All capacity figures given herein are based on zero storage at minimum operating pool level, 1,043.3 ft (318.0 m).

Reservoir is formed by a concrete gravity-type dam; storage began Jan. 6, 1939. Usable capacity, 136.06 mil ft^3 (3.85 hm^3) between elevations 1,043.3 ft (318.00 m), minimum operating pool, and 1,072.0 ft (326.75 m), top of permanent flashboards. Capacity below elevation 1,043.3 ft (318.00 m), minimum operating pool, about 6.54 mil ft^3 (0.185 hm^3). Reservoir is used for storage of water for power. Water is received from Toronto and Lebanon Lake reservoirs and is discharged through a tunnel into Swinging Bridge Reservoir. Figures given herein represent contents above 1,043.3 ft (318.00 m). Records furnished by Orange and Rockland Utilities, Inc.

EXTREMES FOR PERIOD OF RECORD: Maximum contents observed, 145.44 mil ft^3 (4.12 hm^3) July 30, 31, 1945, elevation, 1,073.1 ft (327.08 m); minimum observed (after first filling), about 6.54 mil ft^3 (0.185 hm^3) Mar. 16, 1963, elevation, 1,038.0 ft (316.38 m).

EXTREMES FOR CURRENT YEAR: Maximum contents observed, 131.1 mil ft^3 (3.71 hm^3) Oct. 15, elevation, 1,071.4 ft (326.56 m); minimum observed, 54.0 mil ft^3 (1.53 hm^3) Sept. 26, elevation, 1,060.0 ft (323.09 m).

01435900 NEVERSINK RESERVOIR.--Lat 41°49'40", long 74°38'21", Sullivan County, NY, Hydrologic Unit 02040104, at a gate-house at Neversink Dam on Neversink River, and 2 mi (3 km) southwest of Neversink, NY. DRAINAGE AREA, 91.8 mi^2 (238 km^2). PERIOD OF RECORD, June 1953 to current year. GAGE, nonrecording gage read daily at 0900. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Board of Water Supply, City of New York).

Reservoir is formed by an earthfill rockfaced dam; storage began June 2, 1953. Usable capacity 34,941 mil gal (132.25 hm^3) between minimum operating level, elevation, 1,319.0 ft (402 m) and crest of spillway, elevation, 1,440.0 ft (438.9 m). Capacity at crest of spillway, 37,146 mil gal (140.6 hm^3); at minimum operating level, 2,205 mil gal (8.35 hm^3); dead storage below diversion sill and outlet sill at elevation 1,314.0 ft (400.5 m), 1,680 mil gal (6.36 hm^3). Figures given herein represent total contents. Reservoir impounds water for diversion through Neversink-Grahamsville Tunnel to Rondout Reservoir on Rondout Creek, in Hudson River basin, for water supply of City of New York (see Delaware River Basin, diversions); for release during periods of low flow in the lower Delaware River basin, as directed by the Delaware River Master; and for conservation release. No diversion prior to Dec. 3, 1953. Records furnished by Bureau of Water Resources Development and Department of Environmental Protection, City of New York.

EXTREMES FOR PERIOD OF RECORD: Maximum contents observed, 37,978 mil gal (143.7 hm^3) Apr. 25, 1961, elevation, 1,441.67 ft (439.421 m); minimum observed (after first filling), 1,985 mil gal (7.513 hm^3) Nov. 25, 1964, elevation, 1,316.98 ft (401.415 m).

EXTREMES FOR CURRENT YEAR: Maximum contents observed, 37,295 mil gal (141.2 hm^3) Apr. 16, elevation, 1,440.30 ft (439.003 m); minimum observed, 15,411 mil gal (58.3 hm^3) Sept. 30, elevation, 1,384.78 ft (422.081 m).

01447780 FRANCIS E. WALTER RESERVOIR (formerly published as Bear Creek Reservoir).--Lat 41°06'45", long 75°43'15", Luzerne County, PA, Hydrologic Unit 02040106, at dam on Lehigh River, 2,200 ft (670 m) downstream from Bear Creek and 5 mi (8 km) northwest of White Haven. DRAINAGE AREA, 289 mi^2 (749 km^2). PERIOD OF RECORD, February 1961 to current year. GAGE, water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers).

Reservoir formed by an earthfill embankment covered with a rock shell, with concrete spillway at elevation 1,450.0 ft (441.96 m); storage began Feb. 17, 1961; water in reservoir first reached conservation pool elevation in June 1961. Total capacity at elevation 1,450.0 ft (441.96 m) is 110,700 acre-ft (136 hm^3) of which 108,700 acre-ft (134 hm^3) is controlled storage above elevation 1,300.0 ft or 396.24 m (conservation pool). Dead storage is 2,000 acre-ft (2.47 hm^3). Reservoir is used for flood control and recreation. Figures given herein represent total contents. Flow regulated by three gates and low flow by-pass system. Records furnished by Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD: Maximum contents, 42,600 acre-ft (52.5 hm^3) June 26, 1972, elevation, 1,398.20 ft (426.171 m); minimum (after establishment of conservation pool), 1,220 acre-ft (1.50 hm^3) Sept. 17, 1980, elevation, 1,291.33 ft (393.597 m).

EXTREMES FOR CURRENT YEAR: Maximum contents, 18,940 acre-ft (23.4 hm^3) Mar. 23, elevation, 1,365.58 ft (416.229 m); minimum, 1,220 acre-ft (1.50 hm^3) Sept. 17, elevation, 1,291.33 ft (393.597 m).

RESERVOIRS IN DELAWARE RIVER BASIN--Continued

01449400 PENN FOREST RESERVOIR.--Lat 40°55'45", long 75°33'45", Carbon County, PA, Hydrologic Unit 02040106, at dam on Wild Creek near Hatchery, PA, 0.7 mi (1.1 km) upstream from Hatchery, 2.6 mi (4.2 km) upstream from Wild Creek Dam, 4.4 mi (7.1 km) upstream from mouth, and 10 mi (16 km) northeast of Palmerton. DRAINAGE AREA, 16.5 mi^2 (42.7 km^2). PERIOD OF RECORD, October 1958 to current year. GAGE, water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by city of Bethlehem).

Reservoir formed by an earthfill dam, with ungated concrete spillway at elevation 1,000.00 ft (304,800 m); storage began in October 1958. Capacity at elevation 1,000.00 ft (304.800 m) is 19,980 acre-ft (24.6 hm^3). Reservoir is used for municipal water supply. Figures given herein represent total contents. Regulation is done by valves on pipe through dam. Records furnished by city of Bethlehem. Figures given herein include diversion, since October 1969, from Tunkhannock Creek basin into Wild Creek basin.

EXTREMES FOR PERIOD OF RECORD: Maximum contents, 20,520 acre-ft (25.3 hm^3) Mar. 28, 1978, elevation, 1,000.92 ft (305.080 m); minimum, 176 acre-ft (0.217 hm^3) Oct. 6, 1965, elevation, 902.40 ft (275.052 m).

EXTREMES FOR CURRENT YEAR: Maximum contents, 20,420 acre-ft (25.2 hm^3) Apr. 29, elevation, 1,000.49 ft (304.949 m); minimum, 10,910 acre-ft (13.4 hm^3) Sept. 30, elevation, 976.15 ft (297.713 m).

01449700 WILD CREEK RESERVOIR.--Lat 40°53'50", long 75°33'50", Carbon County, PA, Hydrologic Unit 02040106, at dam on Wild Creek near Hatchery, PA, 1.6 mi (2.6 km) upstream from mouth, 2.4 mi (3.9 km) south of Hatchery, and 7.5 mi (12 km) northeast of Palmerton. DRAINAGE AREA, 22.2 mi^2 (57.5 km^2). PERIOD OF RECORD, January 1941 to current year. Nonrecording gage. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by city of Bethlehem).

Reservoir formed by earthfill dam, with concrete ungated spillway at elevation 820.00 ft (249.936 m); storage began January 27, 1941; water in reservoir first reached minimum pool elevation in February 1941. Total capacity at elevation 820.00 ft (249.936 m) is 12,500 acre-ft (15.4 hm^3) of which 12,000 acre-ft (15 hm^3) is controlled storage. Reservoir is used for municipal water supply. Figures given herein represent usable contents. Regulation is accomplished by valves on pipe through dam. Records furnished by city of Bethlehem. Since October 1969 the basin upstream has received diversion from Tunkhannock Creek basin.

EXTREMES FOR PERIOD OF RECORD: Maximum contents, 12,880 acre-ft (15.9 hm^3) May 23, 1942, elevation, 822.93 ft (250.829 m); minimum (after first filling), 2,680 acre-ft (3.30 hm^3) Nov. 15, 1966, elevation, 774.10 ft (235.946 m).

EXTREMES FOR CURRENT YEAR: Maximum contents, 12,130 acre-ft (15.0 hm^3) Apr. 29, elevation, 820.44 ft (250.070 m); minimum, 8,610 acre-ft (10.6 hm^3) Jun. 26, elevation, 806.92 ft (245.949 m).

01449790 BELTZVILLE LAKE.--Lat 40°50'56", long 75°38'19", Carbon County, PA, Hydrologic Unit 02040106, at dam on Pohopoco Creek, 0.45 mi (0.72 km) upstream from gaging station on Pohopoco Creek, 0.55 mi (0.88 km) upstream from Sawmill Run and 2.3 mi (3.7 km) northeast of Parryville. DRAINAGE AREA, 96.3 mi^2 (249.4 km^2). PERIOD OF RECORD, February 1971 to current year. GAGE, water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers).

Reservoir formed by an earth and rockfill dam with ungated, partially lined spillway at elevation 651.00 ft (198.425 m); storage began Feb. 8, 1971. Capacity at elevation 651.00 ft (198.425 m) is 68,300 acre-ft (84.2 hm^3). Ordinary minimum (conservation) pool elevation, 628.00 ft (191.414 m), capacity, 41,250 acre-ft (50.9 hm^3). Dead storage is 1,390 acre-ft (1.71 hm^3). Reservoir is used for recreation, flood control, low flow augmentation and water supply. Figures given herein represent total contents. Regulation is accomplished by a multi-level water-quality outlet system and two flood-control gates. Records furnished by Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD: Maximum contents 49,730 acre-ft (61.3 hm^3) Jan. 29, 1976, elevation, 636.30 ft (193.944 m); minimum, 28,800 acre-ft (35.5 hm^3) Sept. 30, 1980, elevation, 612.86 ft (186.800 m).

EXTREMES FOR CURRENT YEAR: Maximum contents 45,640 acre-ft (56.3 hm^3) Mar. 24, elevation, 632.44 ft (192.768 m); minimum, 28,800 acre-ft (35.5 hm^3) Sept. 30, elevation, 612.86 ft (186.800 m).

01455400 LAKE HOPATCONG.--Lat 40°55'00", long 74°39'50", Morris County, Hydrologic Unit 02040105, in gatehouse of Lake Hopatcong Dam on Musconetcong River at Landing. DRAINAGE AREA, 25.6 mi^2 (66.3 km^2). PERIOD OF RECORD, February 1887 to current year. Monthend contents only prior to October 1950, published in WSP 1302. GAGE, water-stage recorder. Prior to June 24, 1928, daily readings obtained by measuring from high-water mark to water surface converted to gage height, present datum. Datum of gage is 914.57 ft (278.761 m).

Lake is formed by concrete spillway and earthfill dam completed about 1828. Crest of spillway was lowered 0.11 ft (0.034 m) in 1925. Usable capacity, 7,459,000,000 gal (28.23 hm^3) between (gage height -2.6 ft or -0.792 m, sills of gates and 9.00 ft or 2.743 m, crest of spillway). Flow regulated by four gates (3 by 5 ft or 0.914 by 1.524 m), also by one 24-inch (0.610 m) pipe with gate valve to recreation fountain 250 ft (76.2 m) downstream from dam. Dead storage, about 8,117,000,000 gal (30.72 hm^3). Figures given herein represent usable capacity. Lake used for recreation.

EXTREMES FOR PERIOD OF RECORD: Maximum contents, 8,532,000,000 gal (32.29 hm^3) June 24, 1972, gage height, 10.27 ft (3.130 m); minimum, 1,525,000,000 gal (5.77 hm^3) Dec. 29, 1960, gage height, 0.65 ft (0.198 m).

EXTREMES FOR CURRENT YEAR: Maximum contents, 8,194,000,000 gal (31.01 hm^3) Apr. 10, gage height, 9.87 ft (3.008 m); minimum contents, 5,381,000,000 gal (20.37 hm^3) Feb. 12, 15, 16, gage height, 6.42 ft (1.957 m).

01469200 STILL CREEK RESERVOIR.--Lat 40°51'25", long 75°59'30". Schuylkill County, PA, Hydrologic Unit 02040106, at dam on Still Creek, 1 mi (1.6 km) upstream from mouth and 2.3 mi (3.7 km) north of Hometown, PA. DRAINAGE AREA, 8.5 mi^2 (22.0 km^2). PERIOD OF RECORD, January 1933 to current year. Nonrecording gage. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Panther Valley Water Co.).

Reservoir formed by earth fill dam, with ungated concrete spillway at elevation 1,182.00 ft (360.274 m); storage began in February 1933. Capacity at elevation, 1,182.00 ft (360.274 m) is 8,290 acre-ft (10.2 hm^3). Reservoir is used for municipal water supply. Figures given herein represent total contents. Regulation is accomplished by valves on pipe through dam. Records furnished by Panther Valley Water Co.

EXTREMES FOR PERIOD OF RECORD: Maximum contents, 8,570 acre-ft (10.6 hm^3) Oct. 15, 1955, elevation, 1,182.92 ft (360.554 m), but may have been greater during 1950 and 1951 water years; minimum (after initial filling), 588 acre-ft (0.725 hm^3) Dec. 8, 1944, elevation, 1,136.70 ft (346.466 m).

EXTREMES FOR CURRENT YEAR: Maximum contents, 8,408.80 acre-ft (10.4 hm^3) Oct. 7, 8, elevation, 1,182.40 ft (360.396 m); minimum, 7,095.6 acre-ft (8.75 hm^3) Sept. 30, elevation, 1,177.80 ft (358.993 m).

01470870 BLUE MARSH LAKE.--Lat 40°22'45", long 76°01'59", Berks County, Hydrologic Unit 02040203, at dam on Tulpehocken Creek, 0.8 mi (1.3 km) upstream from gaging station on Tulpehocken Creek, 1.0 mi (1.6 km) northeast of Blue Marsh, 1.9 mi (3.1 km) upstream from Reber's Bridge, and 5.1 mi (8.2 km) southeast of Bernville. DRAINAGE AREA, 175 mi^2 (453 km^2). PERIOD OF RECORD, April 1979 to current year. GAGE, water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers).

Reservior formed by earthfill dam, with concrete ungated spillway at elevation 307.00 ft (93.574 m). Storage began April 23, 1979. Capacity at elevation, 307.00 ft (93.574 m) is 50,000 acre-ft (61.6 hm^3). Dead storage is 3,000 acre-ft (3.70 hm^3). Reservoir is used for flood control, water supply, and recreation. Figures herein represent total contents. Records furnished by Corps of Engineers.

EXTREMES FOR CURRENT YEAR: Maximum contents, 26,250 acre-ft (32.4 hm^3) Oct. 4, elevation, 292.78 ft (89.239 m); minimum, 16,760 acre-ft (20.7 m^3) Nov. 1, elevation, 284.09 ft (86.591 m).

RESERVOIRS IN DELAWARE RIVER BASIN--Continued

01472200 GREEN LANE RESERVOIR.--Lat 40°20'30", long 75°28'45", Montgomery County, PA, Hydrologic Unit 02040203, at dam on Perkiomen Creek at Green Lane, PA, 0.4 mi (0.6 km) west of Green Lane and 2.1 mi (3.4 km) upstream from Unami Creek. DRAINAGE AREA, 70.9 mi^2 (183.6 km^2). PERIOD OF RECORD, December 1956 to current year. GAGE, water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Philadelphia Suburban Water Co.).

Reservoir formed by concrete, gravity-type dam, with ungated spillway at elevation 286.00 ft (87.173 m); storage began December 21, 1956. Capacity at spillway level, elevation 286.00 ft (87.173 m), 13,430 acre-ft (16.6 hm^3). Reservoir is used for municipal water supply. Figures given herein represent total contents. Regulation is accomplished by valves on pipe through dam. Records furnished by Philadelphia Suburban Water Co.

EXTREMES FOR PERIOD OF RECORD: Maximum contents, 17,030 acre-ft (21.0 hm^3) June 23, 1972, elevation, 290.05 ft (88.407 m); minimum (after first filling), 1,270 acre-ft (1.57 hm^3) Aug. 25, 1957, elevation, 251.60 ft (76.688 m).

EXTREMES FOR CURRENT YEAR: Maximum contents, 14,380 acre-ft (17.7 hm^3) Sept. 5, elevation, 287.07 ft (87.499 m); minimum, 6,840 acre-ft (8.43 hm^3) Sept. 30, elevation, 275.38 ft (83.936 m).

MONTHEND ELEVATION AND CONTENTS, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

Date	Elevation (feet)	Contents (million gallons)	Change in contents (equivalent in ft^3/s)	Elevation (feet)	Contents (million gallons)	Change in contents (equivalent in ft^3/s)	Elevation (feet)	Contents (acre-feet)	Change in contents (equivalent in ft^3/s)
	01416900 PEPACTON RESERVOIR ‡			01424997 CANNONSVILLE RESERVIOR ‡			01428900 PROMPTON RESERVOIR †		
Sept. 30	1,255.70	108,714	-	1,128.62	68,498	-	1,125.57	3,580	-
Oct. 31	1,257.40	111,351	+132	1,136.00	78,260	+487	1,125.43	3,540	-0.7
Nov. 30	1,264.40	122,584	+579	1,151.04	100,291	+1,140	1,126.83	3,930	+6.6
Dec. 31	1,262.10	118,827	-188	1,149.61	98,025	-113	1,125.75	6,630	-4.9
CAL YR 1979	-	-	+98.0	-	-	+201	-	-	-1.1
Jan. 31	1,263.58	121,237	+120	1,145.03	91,058	-348	1,125.42	3,540	-1.5
Feb. 29	1,261.30	117,536	-197	1,132.84	74,018	-909	1,125.34	3,510	-.5
Mar. 31	1,275.08	140,882	+1,170	1,152.33	102,368	+1,420	1,128.25	4,380	+14.1
Apr. 30	1,280.49	150,706	+507	1,151.57	101,145	-63.1	1,127.11	4,010	-6.2
May 31	1,277.24	144,758	-297	1,146.90	93,902	-362	1,125.58	3,580	-7.0
June 30	1,271.63	134,819	-513	1,136.42	78,841	-777	1,125.45	3,550	-.5
July 31	1,265.40	124,237	-528	1,129.09	69,096	-486	1,125.32	3,510	-.6
Aug. 31	1,257.57	111,616	-630	1,117.31	54,645	-721	1,125.30	3,500	-.2
Sept. 30	1,246.95	95,746	-819	1,104.32	40,461	-732	1,125.12	3,450	-.8
WTR YR 1980	-	-	-54.8	-	-	-119	-	-	-.2

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (equivalent in ft^3/s)	Elevation (feet)	Contents (acre-feet)	Change in contents (equivalent in ft^3/s)	Elevation (feet)	Contents (million cu ft)	Change in contents (equivalent in ft^3/s)
	01429400 GENERAL EDGAR JADWIN RESERVOIR †			01431700 LAKE WALLENPAUPACK †			01433000 SWINGING BRDIGE RESERVOIR †		
Sept. 30	974.98	0	-	1,178.90	95,660	-	1,065.0	1,191	-
Oct. 31	975.92	0	0	1,177.90	90,260	-87.8	1,066.3	1,241	+18.5
Nov. 30	980.60	68	+1.1	1,182.90	117,450	+457.0	1,068.7	1,335	+36.3
Dec. 31	976.55	0	-1.1	1,181.80	111,400	+98.4	1,066.0	1,229	-39.5
CAL YR 1979	-	-	0	-	-	+27.0	-	-	-3.6
Jan. 31	975.20	0	0	1,179.10	96,740	-238.4	1,064.6	1,176	-19.8
Feb. 29	975.10	0	0	1,177.50	88,100	-150.2	1,065.3	1,203	+10.5
Mar. 31	980.85	76	+1.2	1,184.30	125,280	+604.6	1,066.9	1,264	+22.9
Apr. 30	979.94	48	-.5	1,185.40	131,440	+103.5	1,067.6	1,291	+10.6
May 31	975.10	0	-.8	1,186.10	135,370	+63.9	1,066.1	1,233	-21.7
June 30	975.90	0	0	1,184.90	128,640	-113.0	1,065.1	1,195	-14.7
July 31	974.44	0	0	1,182.00	112,500	-262.5	1,063.0	1,117	-29.1
Aug. 31	974.37	0	0	1,178.80	95,120	-282.6	1,067.1	1,272	+57.8
Sept. 30	974.24	0	0	1,174.00	69,600	-428.9	1,060.1	1,014	-99.5
WTR YR 1980	-	-	0	-	-	-35.9	-	-	-5.6

RESERVOIRS IN DELAWARE RIVER BASIN--Continued

MONTHEND ELEVATION AND CONTENTS, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

Date	Elevation (feet)	Contents (million cu ft)	Change in contents (equivalent in ft^3/s)	Elevation (feet)	Contents (million cu ft)	Change in contents (equivalent in ft^3/s)	Elevation (feet)	Contents (million cu ft)	Change in contents (equivalent in ft^3/s)
	01433100	TORONTO RESERVOIR †		01433200	CLIFF LAKE RESERVOIR †		01435900	NEVERSINK RESERVOIR ‡	
Sept. 30	1,178.7	115	-	1,065.0	83.7	-	1,408.12	23,306	-
Oct. 31	1,179.2	122	+2.6	1,070.4	123	+14.6	1,415.59	26,228	+146
Nov. 30	1,184.4	202	+30.8	1,069.7	118	-1.9	1,422.36	29,039	+145
Dec. 31	1,186.2	231	+11.1	1,065.8	110	-2.9	1,420.15	28,105	-46.6
CAL YR 1979	-	-	-1.7	-	-	+.3	-	-	+43.2
Jan. 31	1,181.1	150	-30.6	1,064.6	81.9	-10.6	1,414.00	25,590	-126
Feb. 29	1,188.9	278	+51.4	1,065.2	85.0	+1.2	1,407.65	23,128	-131
Mar. 31	1,198.0	468	+70.8	1,067.6	102	+6.2	1,432.94	33,755	+530
Apr. 30	1,206.2	676	+80.4	1,067.4	100	-.6	1,437.23	35,791	+105
May 31	1,208.7	945	+100	1,066.1	91.0	-3.4	1,434.02	34,261	-76.4
June 30	1,202.5	579	-141	1,067.4	100	+3.5	1,426.26	30,726	-182
July 31	1,192.0	337	-90.5	1,066.0	90.3	-3.6	1,414.43	25,762	-248
Aug. 31	1,173.1	49	-108	1,067.2	98.6	+3.1	1,397.27	19,397	-318
Sept. 30	1,173.2	50	+.4	1,060.1	54.0	-17.2	1,384.38	15,292	-212
WTR YR 1980	-	-	-2.0	-	-	-.9	-	-	-33.9

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (equivalent in ft^3/s)	Elevation (feet)	Contents (acre-feet)	Change in contents (equivalent in ft^3/s)	Elevation (feet)	Contents (acre-feet)	Change in contents (equivalent in ft^3/s)
	01447780	FRANCIS E. WALTER LAKE ‡		01449400	PENN FOREST RESERVOIR †		01449700	WILD CREEK RESERVOIR †	
Sept. 30	1,304.96	2,510	-	983.09	13,050	-	819.50	11,900	-
Oct. 31	1,299.70	1,970	-8.8	982.53	12,850	-32.5	820.29	12,090	+3.1
Nov. 30	1,298.82	1,870	-1.7	988.17	14,940	+35.1	818.71	11,720	-6.2
Dec. 31	1,302.11	2,210	+5.5	990.15	15,700	+12.4	819.12	11,820	+1.6
CAL YR 1979	-	-	+.3	-	-	+.8	-	-	+.3
Jan. 31	1,300.00	2,000	-3.4	990.46	15,830	+2.1	818.05	11,540	-4.6
Feb. 29	1,300.60	2,060	+1.0	987.52	14,690	-19.8	818.72	11,730	+3.3
Mar. 31	1,304.80	2,490	+7.0	992.59	16,720	+33.0	819.84	11,760	+.5
Apr. 30	1,300.20	2,020	-7.9	1,000.41	20,220	+58.8	820.40	12,120	+6.1
May 31	1,299.73	1,970	-.8	1,000.15	20,070	-2.4	815.57	10,860	-20.5
June 30	1,301.47	2,150	+3.0	999.02	19,540	-8.9	807.77	8,800	-34.6
July 31	1,298.74	1,860	-4.7	990.59	15,890	-59.4	815.32	10,790	+32.4
Aug. 31	1,296.41	1,630	-3.7	983.05	13,030	-46.5	817.96	11,520	+11.9
Sept. 30	1,292.83	1,320	-5.2	976.75	10,910	-35.6	817.86	11,490	-.5
WTR YR 1980	-	-	-1.6	-	-	-3.0	-	-	-.6

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (equivalent in ft^3/s)	Gage Height (feet)	Contents (million gallons)	Change in contents (equivalent in ft^3/s)	Elevation (feet)	Contents (acre-feet)	Change in contents (equivalent in ft^3/s)
	01449790	BELTZVILLE LAKE †		01455400	LAKE HOPATCONG †		01469200	STILL CREEK RESERVOIR †	
Sept. 30	628.12	41,360	-	9.31	7,719	-	1,181.40	8,110	-
Oct. 31	627.80	41,060	-4.9	9.17	7,602	-5.8	1,182.02	8,290	+2.9
Nov. 30	628.67	41,890	+13.9	7.24	6,025	-81.3	1,182.10	8,320	+.5
Dec. 31	628.35	41,580	-5.0	6.54	5,474	-27.5	1,182.07	8,310	-.2
CAL YR 1979	-	-	+3.3	-	-	+.1	-	-	+1.9
Jan. 31	627.49	40,770	-13.2	6.50	5,443	-1.5	1,181.90	8,260	-.8
Feb. 29	627.33	40,610	-2.8	6.53	5,466	+1.2	1,181.70	8,200	-1.0
Mar. 31	628.30	41,540	+15.1	9.51	7,888	+12.1	1,182.15	8,330	+2.1
Apr. 30	628.68	41,900	+6.1	9.76	8,100	+10.9	1,182.15	8,330	0
May 31	627.95	41,200	-11.4	9.17	7,602	-24.9	1,182.00	8,290	-.7
June 30	627.46	40,740	-7.7	8.95	7,418	-9.5	1,181.50	8,140	-2.5
July 31	626.90	40,200	-8.8	8.64	7,161	-12.8	1,180.20	7,760	-6.2
Aug. 31	622.90	36,610	-58.4	8.17	6,775	-19.3	1,178.90	7,400	-5.9
Sept. 30	612.86	28,800	-131	7.67	6,369	-20.9	1,177.80	7,100	-5.0
WTR YR 1980	-	-	-17.3	-	-	-5.7	-	-	-1.4

RESERVOIRS IN DELAWARE RIVER BASIN--Continued

MONTHEND ELEVATION AND CONTENTS, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (equivalent in ft³/s)	Elevation (feet)	Contents (acre-feet)	Change in contents (equivalent in ft³/s)	Elevation (feet)	Contents (area-feet)	Change in contents (equivalent in ft³/s)
	01470870	BLUE MARSH LAKE † FOR PERIOD APRIL TO SEPTEMBER 1979		01470870	BLUE MARSH LAKE †		01472200	GREEN LANE RESERVOIR †	
Sept. 30				289.81	22,680	-	286.00	13,430	-
Oct. 31				284.14	16,810	-95.5	286.00	13,430	0
Nov. 30				285.37	17,990	+19.8	286.07	13,490	+1.0
Dec. 31				285.44	18,060	+1.1	286.00	13,430	-1.0
CAL YR 1978			1979	-	-	+24.9	-	-	-.2
Jan. 31				285.00	17,620	-7.2	285.88	13,330	-1.6
Feb. 29				284.97	17,590	-.5	285.88	13,330	0
Mar. 31				285.57	18,180	+9.6	286.37	13,760	+7.0
Apr. 30	242.00	73	+1.2	290.26	23,200	+84.4	286.21	13,620	-2.4
May 31	273.62	8,802	+142	289.87	22,750	-7.3	286.00	13,430	-3.1
June 30	283.22	15,966	+120	289.99	22,890	+2.4	285.40	12,900	-8.9
July 31	283.58	16,294	+5.3	289.60	22,450	-7.2	283.90	11,680	-19.8
Aug. 31	284.72	17,358	+17.3	288.63	21,360	-17.7	279.50	8,900	-45.2
Sept. 30	289.81	22,683	+89.5	286.52	19,130	-37.5	275.38	6,840	-34.6
WTR YR 1979			1980	-	-	-4.9	-	-	-9.1

‡ Elevation at 0900 hours on first day of following month.
† Elevation or gage height at 2400 hours.
a Observed.
e Estimated.
* Elevation at 0900 hours.

DELAWARE RIVER BASIN

DIVERSIONS AND WITHDRAWALS

WITHDRAWALS FROM THE DELAWARE RIVER BASIN

01415200 Diversion from Pepacton Reservoir, NY, on East Branch Delaware River to Rondout Reservoir on Rondout Creek, in Hudson River basin, for municipal supply of city of New York. No diversion prior to Jan. 6, 1955. Records furnished by Board of Water Supply and Department of Water Resources, city of New York. REVISIONS (Water Years).--WRD-NY 1972: 1970.

01423900 Diversion from Cannonsville Reservoir, NY, on West Branch Delaware River to Rondout Reservoir on Rondout Creek, in Hudson River basin, for municipal supply of city of New York. No diversion prior to Jan. 29, 1964. Records furnished by Board of Water Supply, city of New York.

01435800 Diversion from Neversink Reservoir, NY, on Neversink River to Rondout Reservoir on Rondout Creek, in Hudson River basin, for municipal supply of city of New York. No diversion prior to Dec. 3, 1953. Records furnished by Board of Water Supply and Department of Water Resources, city of New York.

01436520 Village of Woodridge, NY, diverts water from East Pond Reservoir, tributary to Neversink River, for municipal supply outside of basin. Records furnished by village of Woodridge.

01437360 Diversion from Bear Swamp Reservoir, NY, tributary to Neversink River, by the New York State Training School, Otisville, NY, for water supply outside of basin. Records furnished by Delaware River Basin Commission.

01447750 Diversion from Bear Creek, PA, tributary to Lehigh River, by Bear Creek Gas and Water Company for water supply outside of basin. Records furnished by Delaware River Basin Commission.

01448830 Diversion from Hazle Creek Watershed by Hazelton Joint Sewerage Authority for municipal water supply. Waste effluent from the municipal water system is released to the Susquehanna River. Records furnished by Delaware River Basin Commission.

01460500 Diversion by Delaware and Raritan Canal from Delaware River at Raven Rock, for municipal and industrial use. Water is discharged into the Raritan River at New Brunswick. Records of discharge are collected on the Delaware and Raritan Canal at Kingston, (see station 01460500).

WITHDRAWALS BY CITY OF NEW YORK

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

Month	PEPACTON RESERVOIR 01415200	CANNONSVILLE RESERVOIR 01423900	NEVERSINK RESERVOIR 01435800
October	703	377	232
November	697	183	220
December	699	347	214
CAL YR 1979	650	201	262
January	140	596	207
February	269	580	147
March	621	295	73.0
April	339	0	436
May	690	40.3	207
June	697	293	230
July	697	128	272
August	697	0.45	307
September	699	93.4	185
WTR YR 1980	580	244	228

MISCELLANEOUS WITHDRAWALS FROM BASIN

	EAST POND RESERVOIR 01436520	BEAR SWAMP RESERVOIR *01437360	BEAR CREEK 01447750	HAZLE CREEK 01448830	DELAWARE & RARITAN CANAL 01460500
October	.5		0	3.0	91.9
November	.5		0	3.9	99.3
December	.5		0	3.6	108
CAL YR 1979	.5		2.5	3.9	94.7
January	.5		0	3.9	117
February	.5		0	3.9	109
March	.5		3.8	3.9	124
April	.5		8.8	3.4	122
May	.5		0	3.9	113
June	.5		0	4.0	80.9
July	.5		0	3.9	67.2
August	.5		0	3.9	68.7
September	.5		0	3.1	71.6
WTR YR 1980	.5		1.0	3.7	97.8

* Data not available this year but, from past records, withdrawal is approximately 0.5 ft^3/s (0.014 m^3/s).

DIVERSIONS AND WITHDRAWALS--Continued

DIVERSIONS WITHIN THE DELAWARE RIVER BASIN

01463480 Diversion from the Delaware River at the Morrisville Filtration Plant for municipal supply, by the Borough of Morrisville, PA. The water withdrawn at this site is returned to the basin after treatment, only slightly diminished by consumptive uses and losses in transmission. Records furnished by the Borough of Morrisville, PA.

01463490 Diversion from the Delaware River just above the Trenton gaging station for municipal supply by the city of Trenton, NJ. The water being withdrawn is returned to the basin after treatment only slightly diminished by consumptive uses and losses in transmission. Records furnished by the City of Trenton.

CORRECTION.--The station number for the diversion by the City of Trenton has been changed to 01463490 to prevent confusion with the gaging station.

01467030 Diversion from the Delaware River at the Torresdale Intake for municipal supply, by the City of Philadelphia, PA. The water being withdrawn at this intake is returned to the basin after treatment only slightly diminished by consumptive uses and losses in transmission. Records furnished by the Delaware River Basin Commission.

01474500 Diversion from the Schuylkill River at the Belmont and Queen Lanes Intakes for municipal supply, by the City of Philadelphia, PA. The water being withdrawn at these intakes is returned after treatment within the Delaware River basin only slightly diminished by consumptive uses and losses in transmission. Records furnished by the Delaware River Basin Commission.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

Month	WITHDRAWAL BOROUGH OF MORRISVILLE 01463480	WITHDRAWAL CITY OF TRENTON 01463490	WITHDRAWAL CITY OF PHILADELPHIA		
			DELAWARE RIVER TORRESDALE 01467030	SCHUYLKILL RIVER 01474500	
				BELMONT	QUEEN LANE
October	6.74	46.3	319	98.9	152
November	6.98	44.4	321	97.8	139
December	5.89	46.0	316	99.3	151
CAL YR 1979	6.60	48.9	340	104	155
January	5.55	45.5	325	98.7	152
February	5.99	47.9	251	87.7	163
March	6.32	48.1	329	90.5	157
April	6.19	47.0	319	99.0	149
May	6.77	48.6	331	99.5	150
June	6.67	54.3	376	108	164
July	6.85	57.5	401	119	186
August	6.82	56.1	404	117	177
September	6.92	53.6	366	108	157
WTR YR 1980	6.47	49.6	338	102	158

DIVERSIONS IMPORTED INTO BASIN

01367630 Water diverted from Morris Lake, tributary to the Wallkill River (Hudson River basin), by the Newton Water and Sewer Authority for municipal use. After use the water is released into the Paulins Kill (Delaware River basin). Records furnished by the Delaware River Basin Commission.

01578420 Water diverted from West Branch Octoraro Creek (Susquehanna River basin) at the McCray Plant of the Octoraro Water Co., for municipal use. After use the water is released into the Delaware River basin. Records furnished by the Delaware River Basin Commission.

01578450 Water diverted from Octoraro Lake (Susquehanna River basin) by Chester Water Authority for municipal use. After use the water is released into the Delaware River basin. Records furnished by the Delaware River Basin Commission.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

Month	MORRIS LAKE 01367630	OCTORARO CREEK		
		OCTORARO WATER CO. 01578420	CHESTER WATER AUTHORITY 01578450		
October	1.4	2.1	46.1		a45.7
November	1.4	2.6	42.9		a45.8
December	1.5	2.7	43.3		a45.0
CAL YR 1979	1.4	2.3	44.6	1978	a45.4
January	1.4	2.8	43.7		a44.7
February	1.4	2.3	47.3		a45.8
March	1.4	2.2	46.7		a45.0
April	1.4	2.3	41.4		a43.8
May	1.4	2.3	43.0		a43.3
June	1.5	2.0	44.6		a44.0
July	1.5	2.4	47.2		a45.0
August	1.4	2.4	48.0		a45.8
September	1.4	2.4	52.3		a45.0
WTR YR 1980	1.4	2.4	45.5	1979	a44.9

a Corrected figures of diversion by Chester Water Authority superseding those published in WDR NJ-79-2.

As the number of streams on which streamflow information is likely to be desired far exceeds the number of stream-gaging stations feasible to operate at one time, the Geological Survey collects limited streamflow data at sites other than stream-gaging stations. When limited streamflow data are collected on a systematic basis over a period of years for use in hydrologic analyses, the site at which the data are collected is called a partial-record station. Data collected at these partial-record stations are usable in low-flow or floodflow analyses, depending on the type of data collected. In addition, discharge measurements are made at other sites not included in the partial-record program. These measurements are generally made in times of drought or flood to give better areal coverage to those events. Those measurements and others collected for some special reason are called measurements at miscellaneous sites.

Records collected at partial-record stations are presented in two tables. The first is a table of discharge measurements at low-flow partial-record stations, and the second is a table of annual maximum stage and discharge at crest-stage stations. Discharge measurements made at miscellaneous sites for both low flow and high flow are given in a third table.

Low-flow partial-record stations

Measurements of streamflow in New Jersey made a low-flow partial-record stations are given in the following table. Most of these measurements were made during periods of base flow when streamflow is primarily from ground-water storage. These measurements, when correlated with the simultaneous discharge of a nearby stream where continuous records are available, will give a picture of the low-flow potentiality of a stream. The column headed "Period of record" shows the water years in which measurements were made at the same, or practically the same, site.

Discharge measurements made at low-flow partial-record stations during water year 1980

Station number	Station name	Location	Drainage area (mi^2)	Period of record	Measurements	
					Date	Discharge (ft^3/s)
		Maurice River basin				
01411450	Still Run at Aura, NJ	Lat 39°40'23", long 75°07'50", Gloucester County, at bridge on Aura-Glassboro Road, 0.4 mi (0.6 km) east of Aura, 1.0 mi (1.6 km) upstream of Silver Lake, and 2.6 mi (4.2 km) southeast of Glassboro.	3.21 (8.31 km^2)	1966, 1976-80	7-09-80 9-04-80	1.6 .69
01411456	Little Ease Run near Clayton, NJ	Lat 39°39'32", long 75°04'04", Gloucester County, at bridge on Academy Road, 0.9 mi (1.4 km) west of Fries Mill, 1.3 mi (2.1 km) east of Clayton, and 1.4 mi (2.3 km) downstream from Beaverdam Branch.	9.77 (25.30 km^2)	1966, 1976-80	7-03-80 9-04-80	3.8 .78
01411462	Scotland Run at Franklinville, NJ	Lat 39°37'05", long 75°03'35", Gloucester County, at bridge on State Route 538, 0.9 mi (1.4 km) east of Franklinville, 2.7 mi (4.3 km) upstream of Malaga Lake, and 2.8 mi (4.5 km) southeast of Clayton.	14.8 (38.3 km^2)	1976-80	7-03-80 9-04-80	15 4.4
01411700	Muddy Run at Centerton, NJ	Lat 39°31'28", long 75°10'09", Salem County, 130 ft (55 m) downstream of unnamed right bank tributary, 200 ft (60 m) downstream of bridge on New Jersey Routes 540 and 553 in Centerton, and 4.7 mi (7.6 km) south of Elmer.	37.7 (97.6 km^2)	1976-80	7-09-80 9-02-80	25 14
01411950	Buckshutem Creek near Laurel Lake, NJ	Lat 39°20'51", long 75°03'47", Cumberland County, at bridge on State Route 555 (Dividing Creek Road), 1.3 mi (2.1 km) upstream of Gravelly Run, 1.8 mi (2.9 km) west of Laurel Lake, and 3.6 mi (5.2 km) southwest of Millville.	16.1 (41.7 km^2)	1976-77, 1980	7-10-80 9-03-80	4.5 .48
01412120	Muskee Creek near Port Elizabeth, NJ	Lat 39°18'56", long 74°57'31", Cumberland County, at bridge on State Route 543, 1.3 mi (2.1 km) east of Port Elizabeth, 1.9 mi (3.1 km) upstream from mouth, and 2.8 mi (4.5 km) northeast of Mauricetown.	13.1 (33.9 km^2)	1969, 1976-80	7-22-80 9-03-80	9.2 4.8
		Cohansey River basin				
01412405	Cohansey River near Beals Mill, NJ	Lat 39°31'29", long 75°15'59", Cumberland County, at bridge on Beals Mill Road, 1,300 ft (4,000 m) downstream of Beals Mill and Bostwick Lake, and 1.6 mi (3.0 km) west of Deerfield Street.	9.44 (24.45 km^2)	1976-80	7-09-80 9-03-80	6.6 4.4

Discharge measurements made at low-flow partial-record stations during water year 1980--Continued

Station number	Station name	Location	Drainage area (mi^2)	Period of record	Measurements Date	Measurements Discharge (ft^3/s)
		Cohansey River basin--Continued				
01413010	Barrett Run near Bridgeton, NJ	Lat 39°26'58", long 75°15'42", Cumberland County, at bridge on Mary Elmer Drive, 1,800 ft (550 m) upstream from Mary Elmer Lake, and 2.1 mi (3.4 km) northwest of the intersection of State Routes 49 and 77 in Bridgeton.	7.02 (18.18 km^2)	1966, 1976-80	7-10-80 9-02-80	4.8 3.5
01413020	Indian Fields Branch at Bridgeton, NJ	Lat 39°26'04", long 75°13'08", Cumberland County, at bridge on Manheim Avenue in Bridgeton, 1,300 ft (4,000 m) upstream of East Lake.	4.64 (12.02 km^2)	1976-80	7-22-80 9-02-80	6.3 6.0
		Stow Creek basin				
01413080	Raccoon Ditch at Davis Mill, NJ	Lat 39°25'26", long 75°22'01", Cumberland County, at bridge on County Highway 90 at Davis Mill, 2.8 mi (4.5 km) upstream from mouth, and 4.3 mi (6.9 km) southwest of Shiloh.	3.19 (8.26 km^2)	1976-78, 1980	9-12-79 7-22-80 9-02-80	a3.8 3.6 3.2
		Delaware River basin				
01443475	Trout Brook near Middleville, NJ	Lat 41°03'03", long 74°51'23", Sussex County, at bridge on County Highway 612, 0.4 mi (0.6 km) upstream from mouth, 0.5 mi (0.8 km) southeast of Middleville, and 5.1 mi (8.2 km) west of Newton.	24.0 (62.2 km^2)	1979-80	7-08-80 9-02-80	29 1.9
01455100	Lopatcong Creek at Phillipsburg, NJ	Lat 40°40'38", long 75°10'13", Warren County, at bridge on alternate U.S. Route 22 in Phillipsburg, 100 ft (30 m) upstream from tracks of Central Railroad of New Jersey, and 3,000 ft (910 m) above mouth.	14.2 (36.8 km^2)	1958-64, 1979-80	11-21-79 2-13-80 5-01-80	9.4 7.7 18
01455300	Pohatcong Creek at Carpentersville, NJ	Lat 40°37'30", long 75°11'10", Warren County, at bridge on Carpentersville-Riegelsville Road, 2,000 ft (610 m) above mouth, and 0.7 mi (1.1 km) south of Carpentersville.	57.1 (147.9 km^2)	1932, 1958-64, 1979-80	2-13-80 5-01-80	33 103
01455370	Weldon Brook at Hurdtown, NJ	Lat 40°58'10", long 74°35'56", Morris County, at bridge on Union Turnpike at Hurdtown, 500 ft (150 m) downstream from Lake Shawnee Dam.	8.10 (20.98 km^2)	1973-80	7-08-80	.90
01458100	Hakihokake Creek at Milford, NJ	Lat 40°34'06", long 75°05'44", Hunterdon County, at highway bridge in Milford, 4,000 ft (1,200 m) upstream from mouth.	17.2 (44.5 km^2)	1944, 1958-64, 1979-80	10-31-79 5-05-80	19 29
01458400	Harihokake Creek near Frenchtown, NJ	Lat 40°32'53", long 75°04'09", Hunterdon County, at bridge on Frenchtown-Milford Road, 1,600 ft (490 m) upstream from mouth, and 1.5 mi (2.4 km) north of Frenchtown.	9.75 (25.3 km^2)	1944, 1958-65, 1979-80	3-12-80	8.4
01461300	Wickecheoke Creek at Stockton, NJ	Lat 40°24'41", long 74°59'13", Hunterdon County, at bridge on State Route 29 at Stockton, and 900 ft (270 m) above mouth.	26.6 (68.9 km^2)	1944, 1958-64, 1979-80	10-30-79 5-05-80	14 21
01461900	Alexauken Creek near Lambertville, NJ	Lat 40°22'51", long 74°56'54", Hunterdon County, at bridge on State Route 29, 0.4 mi (0.6 km) upstream from mouth, and 1.1 mi (1.8 km) north of Lambertville.	14.9 (38.6 km^2)	1944, 1958-64, 1979-80	10-30-79 5-05-80	8.5 16

Discharge measurements made at low-flow partial-record stations during water year 1980--Continued

Station number	Station name	Location	Drainage area (mi^2)	Period of record	Measurements	
					Date	Discharge (ft^3/s)
		Delaware River basin--Continued				
01483010	Deep Run near Alloway, NJ	Lat 39°32'34", long 75°21'18", Salem County, at bridge on Telegraph Road, 0.8 mi (1.3 km) upstream from Elkinton Mill Pond, 1.3 mi (2.1 km) south of Alloway, and 2.5 mi (4.0 km) northwest of Pecks Corner.	5.30 (13.73 km^2)	1979-80	7-09-80 9-03-80	5.4 3.1

a Not previously published.

* Also a crest-stage partial-record station.

† Operated as a continuous-record gaging station.

CREST-STAGE PARTIAL RECORD STATIONS

The following table contains annual maximum discharges for crest-stage stations. A crest-stage gage is a device which will register the peak stage occurring between inspections of the gage. A stage-discharge relation for each gage is developed from discharge measurements made by indirect measurements of peak flow or by current meter. The date of the maximum discharge is not always certain but is usually determined by comparison with nearby continuous-record stations, weather records, or local inquiry. Only the maximum discharge for each water year is given. Information on some lower floods may have been obtained, and discharge measurements may have been made for purposes of establishing the stage-discharge relation, but these are not published herein. The years given in the period of record represent water years for which the annual maximum has been determined. The gage heights are heights on the upstream side of the bridge, above the dam or at the discontinued continuous-record gaging station unless otherwise noted.

ANNUAL MAXIMUM DISCHARGE AT CREST-STAGE PARTIAL-RECORD STATIONS

Station No.	Station name	Location	Drainage area (mi^2)	Period of record	Annual maximum		
					Date	Gage height (feet)	Discharge (ft^3/s)
		Cohansey River basin					
01412500	West Branch Cohansey River at Seeley, NJ	Lat 39°29'06", long 75°15'33", Cumberland County, on right bank 15 ft (4.6 m) upstream from county bridge, Highway 31, at Seeley, 450 ft (137 m) upstream from mouth and 4.1 mi (6.6 km) northwest of Bridgeton. Datum of gage is 42.23 ft (12.872 m) National Geodetic Vertical Datum of 1929.	2.55 (6.60 km^2)	1952-67‡, 1968-80	6-30-80	--	--
		Delaware River basin					
*01445000	Pequest River at Huntsville, NJ	Lat 40°58'49", long 74°46'38", Sussex County, on right bank, 20 ft (6.1 km) upstream from highway bridge in Huntsville, and 0.4 mi (0.6 km) downstream from East Branch. Datum of gage is 553.81 ft (168.801 m) National Geodetic Vertical Datum of 1929.	31.4 (81.3 km^2)	1940-62‡, 1963-80	3-21-80	3.70	260
*01446000	Beaver Brook near Belvidere, NJ	Lat 40°50'40", long 75°02'48, Warren County, on right bank, 2,000 ft (610 m) upstream from mouth, and 2 mi (3 km) east of Belvidere. Datum of gage is 303.36 ft (92.464 m) National Geodetic Vertical Datum of 1929.	36.2 (93.8 km^2)	1922-61‡, 1963-80	3-21-80	3.20	285
01455200	Pohatcong Creek at New Village, NJ	Lat 40°42'57", long 75°04'20", Warren County, at bridge on Edison Road, 0.4 mi (0.6 km) southeast of New Village, and 4.3 mi (6.9 km) upstream from Merrill Creek. Datum of gage is 308.32 ft (93.976 m) National Geodetic Vertical Datum of 1929.	33.4 (86.5 km^2)	1960-69‡, 1970-80	3-21-80	4.11	663
01455500	Musconetcong River at outlet of Lake Hopatcong, NJ	Lat 40°55'00", long 74°39'55", Morris County, on left bank just upstream of highway bridge 300 ft (91 m) downstream from Lake Hopatcong Dam in Landing. Datum of gage is 904.99 ft (275.841 m) National Geodetic Vertical Datum of 1929.	25.6 (66.3 km^2)	1929-75‡, 1976-80	5-02-80	e3.04	e165
01456000	Musconetcong River at Hackettstown, NJ	Lat 40°53'10", long 74°48'00", Warren County, on right bank 75 ft (23 m) upstream from Saxton Falls Dam, 0.5 mi (0.8 km) upstream from Erie-Lackawanna Railway bridge, and 3.0 mi (4.8 km) northeast of Hackettstown. Datum of gage is 630.93 ft (192.307 m) National Geodetic Vertical Datum of 1929.	70.0 (181.3 km^2)	1921-73‡, 1974-80	3-21-80	2.61	848

CREST-STAGE PARTIAL-RECORD STATIONS

ANNUAL MAXIMUM DISCHARGE AT CREST-STAGE PARTIAL-RECORD STATIONS--CONTINUED

Station no.	Station name	Location	Drainage area (mi^2)	Period of record	Annual maximum		
					Date	Gage height (feet)	Discharge (ft^3/s)
		Delaware River basin--Continued					
01457500	Delaware River at Riegelsville, NJ	Lat 40°35'36", long 75°11'17", Warren County, at suspension bridge at Riegelsville, 600 ft (183 m) upstream from Musconetcong River (flow of which is included in the records for this station since Oct. 1, 1931). Datum of gage is 125.12 ft (38.137 m) National Geodetic Vertical Datum of 1929.	6,328 (16,390 km^2)	1906-71‡, 1972-80	3-22-80	19.89	97,000
01463610	Assunpink Creek at Edinburg, NJ	Lat 40°15'28", long 74°37'05", Mercer County, on left bank, downstream side of Old Trenton Road Bridge (Route 535), 0. 1 mi (1.6 km) west of Edinburg, 0.5 mi (0.8 km) upstream from Bridegroom Run and 3.0 mi (4.8 km) north of Robbinsville. Datum of gage is 63.46 ft (19.343 m) National Geodetic Vertical Datum of 1929.	25.0 (64.7 km^2)	1979-80	3-22-80	--	--
01464400	Crosswicks Creek at New Egypt, NJ	Lat 40°04'03", long 74°31'57", Ocean County, at upstream side of bridge on State Route 528 in New Egypt, and 300 ft (91 m) downstream from Oakford Lake Dam. Datum of gage is 43.46 ft (13.247 m) National Geodetic Vertical Datum of 1929.	37.5 (97.1 km^2)	1968-80	4-10-80	--	--
01464515	Doctors Creek at Allentown, NJ	Lat 40°10'37", long 74°35'57", Monmouth County, at bridge on Breza Road in Allentown, and 0.8 mi (1.3 km) downstream from Conines Millpond dam. Datum of gage is National Geodetic Vertical Datum of 1929.	17.2 (44.6 km^2)	1968-80	4-10-80	b56.33	†
01464530	Blacks Creek at Mansfield Square, NJ	Lat 40°07'02", long 74°41'58", Burlington County, at bridge on Mansfield Square-Crosswicks Road, 0.4 mi (0.6 km) east of Mansfield Square, and 3.4 mi (5.5 km) upstream from mouth. Datum of gage is 12.44 ft (3.792 m) National Geodetic Vertical Datum of 1929.	19.7 (51.0 km^2)	1978-80	4-10-80	b8.56	900
01464538	Crafts Creek at Columbus, NJ	Lat 40°04'44", long 74°43'07", Burlington County, at bridge on Columbus-Mansfield road, 0.4 mi (0.6 km) north of Columbus, and 6.0 mi (9.6 km) northeast of Mount Holly. Datum of gage is 33.71 ft (10.275 m) National Geodetic Vertical Datum of 1929.	5.38 (13.93 km^2)	1978-80	4-10-80	b7.35	245
01464582	Assiscunk Creek near Columbus, NJ	Lat 40°03'13", long 74°44'34", Burlington County, at bridge on Petticoat Bridge Road, 1.7 mi (2.7 km) southwest of Columbus, 4.0 mi (6.4 km) northeast of Mount Holly, and 0.1 mi (0.2 km) downstream from Assiscunk Branch.	10.9 (28.2 km^2)	1978-80	4-10-80	b6.49	177

CREST-STAGE PARTIAL-RECORD STATIONS

ANNUAL MAXIMUM DISCHARGE AT CREST-STAGE PARTIAL-RECORD STATIONS--Continued

Station No.	Station name	Location	Drainage area (mi^2)	Period of record	Annual maximum		
					Date	Gage height (feet)	Discharge (ft^3/s)
		Delaware River basin--Continued					
01465850	South Branch Rancocas Creek at Vincentown, NJ	Lat 39°56'22", long 74°45'50", Burlington County, on left bank 150 ft (46 m) downstream from highway bridge on Lumberton-Vincentown road, 0.8 mi (1.3 km) west of Vincentown, 2.9 mi (4.7 km) southeast of Lumberton, and 3.1 mi (5.0 km) upstream from Southwest Branch. Datum of gage is 13.17 ft (4.014 m) National Geodetic Vertical Datum of 1929.	53.3 (138.0 km^2)	1962-75‡, 1976-80	4-10-80	6.75	805
01465882	Southwest Branch Rancocas Creek at Medford, NJ	Lat 39°54'16", long 74°48'47", Burlington County, at bridge on State Route 70, 0.6 mi (1.0 km) northeast of Medford and 4.2 mi (6.8 km) upstrem from mouth. Datum of gage is 20.72 ft (6.315 m) National Geodetic Vertical Datum of 1929.	47.9 (124.1 km^2 Revised)	1975-80	4-10-80	b4.04	680
01467057	Pompeston Creek at Cinnaminson, NJ	Lat 40°00'11", long 74°59'00", Burlington County, at U.S. Route 130 bridge, 0.7 mi (1.1 km) northwest of Cinnaminson, 1.7 mi (2.7 km) upstream from mouth, and 2.1 mi (3.4 km) east of Palymra. Datum of gage is 11.36 ft (3.463 m) National Geodetic Vertical Datum of 1929.	5.75 (14.89 km^2)	1975-80	4-10-80	b5.44	†
01467069	North Branch Pennsauken Creek near Moorestown, NJ	Lat 39°57'10", long 74°58'10", Burlington County, at bridge on Route 41 (Kings Highway) 1.7 mi (2.8 km) southwest of Moorestown. Datum of gage is 5.9 ft (1.80 m) National Geodetic Vertical Datum of 1929.	12.8 (33.2 km^2)	1975-80	8-05-80	4.17	328
*01467130	Cooper River at Kirkwood, NJ	Lat 39°50'11", long 75°00'06", Camden County, 5 ft (1.5 m) upstream from dam at Kirkwood Lake in Kirkwood, and 1.0 mi (1.6 km) north of Laurel Springs. Datum of gage is 57.82 ft (17.624 m) National Geodetic Vertical Datum of 1929.	5.14 (13.3 km^2)	1964-80	1-12-80	1.05	64
*01467160	North Branch Cooper River near Marlton, NJ	Lat 39°53'20", long 74°58'08", Camden County, at bridge on blacktop road to Springdale, 2.5 mi (4.0 km) west of Marlton. Datum of gage is 36.36 ft (11.083 m) National Geodetic Vertical Datum of 1929.	5.33 (13.80 km^2)	1964-80	4-10-80	b2.36	130
*01467305	Newton Creek at Collingswood, NJ	Lat 39°54'30", long 75°03'13", Camden County, at bridge on Park Avenue in Collingswood, 0.3 mi (0.5 km) east of Cuthbert Avenue. Datum of gage is 18.74 ft (5.712 m) National Geodetic Vertical Datum of 1929.	1.32 (3.42 km^2)	1964-80	8-05-80	3.09	144
01467317	South Branch Newton Creek at Haddon Heights, NJ	Lat 39°52'45", long 75°04'26", Camden County, at bridge on Haddon Heights Park in Haddon Heights, and 2.6 mi (4.2 km) south of Collingswood. Datum of gage is 23.34 ft (7.114 m) National Geodetic Vertical Datum of 1929.	0.63 (1.63 km^2)	1964-80	8-05-80	3.64	77

CREST-STAGE PARTIAL-RECORD STATIONS

ANNUAL MAXIMUM DISCHARGE AT CREST-STAGE PARTIAL-RECORD STATIONS--Continued

Station No.	Station name	Location	Drainage area (mi^2)	Period of record	Annual maximum		
					Date	Gage height (feet)	Discharge (ft^3/s)
		Delaware River basin--Continued					
*01467330	South Branch Big Timber Creek at Blackwood, NJ	Lat 39°48'17", long 75°03'13", Camden County, at bridge on Lower Landing Roaod in Blackwood, and 3.0 mi (4.8 km) upstream from mouth. Datum of gage is 8.41 ft (2.563 m) National Geodetic Vertical Datum of 1929.	19.1 (49.5 km^2)	1964-80	3-21-80	b3.26	176
01467351	North Branch Big Timber Creek at Laurel Road at Laurel Springs, NJ	Lat 39°49'07", long 75°00'56", Camden County, at bridge on Laurel Road in Laurel Springs, and 2.5 mi (4.0 km) upstream from confluence with the South Branch. Datum of gage is 26.89 ft (8.196 m) National Geouetic Vertical Datum of 1929.	7.16 (18.54 km^2)	1976-80	1-21-79 4-10-80	1.93 1.37	c380 130
01475000	Mantua Creek at Pitman, NJ	Lat 39°44'14", long 75°06'53", Gloucester County, on left abutment of Wadsworth Dam, 0.9 mi (1.4 km) east of Pitman, and 2.0 mi (3.2 km) upstream from Porch Branch. Datum of gage is 68.51 ft (20.882 m) National Geodetic Vertical Datum of 1929.	6.75 (17.48 km^2)	1940-76‡, 1977-80	6-30-80	1.54	79
01475019	Mantua Creek at Salina, NJ	Lat 39°46'13", long 75°05'59", Gloucester County, at bridge on Salina-Sewell Road, 0.2 mi (0.3 km) downstream of Bees Branch, and 0.5 mi (0.8 km) west of Salina. Datum of gage is 11.67 ft (3.557 m) National Geodetic Vertical Datum of 1929.	14.2 (36.8 km^2)	1975-80	1-21-79 1-12-80	a6.3 2.28	d550 141
01477110	Raccoon Creek at Mullica Hill, NJ	Lat 39°44'10", long 75°13'30", Gloucester County, at bridge State Routes 45 and 77 in Mullica Hill, 1,200 ft (370 m) downstream of Mullica Hill Pond and 5.5 mi (8.8 km) west of Pitman. Datum of gage is 21.91 ft (6.678 m) National Geodetic Vertical Datum of 1929.	15.6 (40.4 km^2)	1978-80	1-22-79 4-01-80	b3.43 ab1.7	c780 210
01477480	Oldmans Creek near Harrisonville, NJ	Lat 39°41'40", long 75°18'38", Salem County, at bridge on Harrisonville Station Road, 2.4 mi (3.8 km) west of Harrisonville, and 2.8 mi (4.5 km) north of Woodstown. Datum of gage is 16.58 ft (5.054 m) National Geodetic Vertical Datum of 1929.	13.6 (35.2 km^2)	1975-80	3-25-80, 4-10-80	3.67	135

* Also a low-flow partial-record station.
† Discharge not determined.
‡ Operated as a continuous-record gaging station.
a Estimated.
b Downstream side of bridge.
c Not previously published.
d Revised.
e Peak may have been higher on Mar. 21, 1980.

DISCHARGE MEASUREMENT AT MISCELLANEOUS SITES

Measurements of streamflow at points other than gaging stations are given in the following table. Those that are measurements of base flow are designated by an asterisk (*); measurements of peak flow by a dagger (†).

DISCHARGE MEASUREMENTS MADE AT MISCELLANEOUS SITES DURING WATER YEAR 1980

Stream	Tributary to	Location	Drainage area (mi²)	Measured previously (water years)	Measurements Date	Measurements Discharge (ft³/s)
		Delaware River basin				
01443440 Paulins Kill	Delaware River	Lat 41°06'20", long 74°45'19", Sussex County, at bridge in Balesville, 2.3 mi (3.7 km) upstream from Paulins Kill Lake, and 3.0 mi (4.8 km) north of Newton.	67.1 (173.8 km²)	1979	1-30-80 3-22-80 5-01-80	*75 707 428
01444100 Paulins Kill	Delaware River	Lat 40°55'14", long 75°05'18", Warren County, at bridge on U.S. Route 46 at Columbia, 2.3 mi (3.7 km) southwest of Polkville, and 3.2 mi (5.2 km) southeast of Knowlton.	177 (458 km²)	1978-79	3-04-80 4-30-80	*140 1320
01446400 Pequest River	Delaware River	Lat 40°49'45", long 75°04'44", Warren County, at bridge on State Route 519, in Belvidere, 1,400 ft (430 m) upstream of mouth.	158 (409 km²)	1950,53, 1955,74, 1977-79	3-10-80 5-02-80 6-04-80	138 585 221
01455801 Musconetcong River	Delaware River	Lat 40°55'10", long 74°44'07", Sussex County, at bridge at Lockwood 0.2 mi (0.3 km) downstream from Lubbers Run, and 1.5 mi (2.4 km) northwest of Stanhope.	60.5 (156.7 km²)	1979	3-12-80 3-21-80 5-14-80	*54 200 184
01456200 Musconetcong River	Delaware River	Lat 40°48'48", long 74°50'32", Warren County, at bridge in Beatyestown, 2.1 mi (3.4 km) northeast of Stephensburg, and 3.0 mi (4.8 km) south of Hackettstown.	90.7 (234.9 km²)	1979	3-12-80 5-14-80	*97 306
01457400 Musconetcong River	Delaware River	Lat 40°35'32", long 75°11'20", Warren County, at bridge on State Highway 13 at Riegelsville, 0.2 mi (0.4 km) north of Mount Joy, and 0.2 mi (0.3 km) upstream from mouth.	156 (404 km²)	1940-55, 1973, 1977-79	2-13-80 5-01-80	*148 757
01460880 Lockatong Creek	Delaware River	Lat 40°24'58", long 75°01'05", Hunterdon County, at bridge on Raven Rock-Rosemont Road, and 0.7 mi (1.1 km) upstream from mouth.	22.9 (59.3 km²)	1978-79	10-30-79	*10
01462005 Swan Creek	Delaware River	Lat 40°21'51", long 74°56'41", Hunterdon County, at bridge in Lambertville, 250 ft (76 m) upstream from Delaware and Raritan Canal feeder, 350 ft (107 m) downstream from State Route 29, and 500 ft (150 m) upstream from moutn.	3.28 (8.50 km²)	1979	10-30-79 4-09-80 4-28-80 4-30-80	*0.95 120 40 5.8
01463568 Assunpink Creek	Delaware River	Lat 40°13'05", long 74°33'08", Monmouth County, at bridge at Carsons Mills, 0.1 mi (0.2 km) upstream from New Sharon Branch, and 1.3 mi (2.1 km) northeast of Pages Corner.	12.5 (32.4 km²)	1979	5-07-80	*22
01463625 Assunpink Creek	Delaware River	Lat 40°16'06", long 74°42'07", Mercer County, at bridge on Basin Road, midway between U.S. Route 1 and Penn Central railroad tracks, 0.5 mi (0.8 km) southeast of Bakersville, and 1.4 mi (2.3 km) southeast of Franklin Corner.	38.6 (100.0 km²)	1977-79	5-07-80	*70
01465835 South Branch Rancocas Creek	Rancocas Creek	Lat 39°55'23", long 74°43'05", Burlington County, at bridge on light-duty Road, downstream from Friendship Creek, 0.5 mi (0.8 km) northwest of Retreat, and 2.0 mi (3.2 km) southwest of Vincentown.	44.4 (115.0 km²)	1979	4-28-80	81

DISCHARGE MEASUREMENTS AT MISCELLANEOUS SITES

DISCHARGE MEASUREMENTS MADE AT MISCELLANEOUS SITES DURING WATER YEAR 1980--Continued

Stream	Tributary to	Location	Drainage area (mi^2)	Measured previously (water years)	Measurements	
					Date	Discharge (ft^3/s)
		Delaware River basin--Continued				
01465970 North Branch Rancocas Creek	Rancocas Creek	Lat 39°58'04", long 74°34'48", Burlington County, at bridge on Lakehurst Road in Browns Mills, at outflow of Mirror Lake, 5.0 mi (8.0 km) east of Pemberton.	19.5 (50.5 km^2)	1979	4-28-80	86
01467120 Cooper River	Delaware River	Lat 39°49'43", long 74°58'55", Camden County, at bridge on Norcross Road in Lindenwold 50 ft (15 m) downstream from outflow of Linden Lake, 1.1 mi (1.8 km) southwest of Gibbsboro, and 3.7 mi (6.0 km) northeast of Berlin.	1.13 (2.93 km^2)	1979	4-29-80	3.0
01467329 South Branch Big Timber Creek	Delaware River	Lat 39°48'05", long 75°04'27", Gloucester County, at bridge on Blackwood-Clementon Road in Blackwood, at Blackwood Lake 3.5 mi (5.6 km) west of Lindenwold.	19.1 (49.5 km^2)	1979	4-29-80	52
01477510 Oldmans Creek	Delaware River	Lat 39°41'57", long 75°20'01", Salem County, at bridge on Kings Highway in Porches Mill, 1.0 mi (1.6 km) north of Seven Stars, and 3.1 mi (4.8 km) north of Woodstown.	21.0 (54.4 km^2)	1979	3-22-80 4-10-80 4-30-80	83 151 49

* Base flow.

TIDAL CREST-STAGE STATIONS

The following table contains annual maximum stages for tidal crest-stage stations. The information is obtained from a crest-stage gage or a water-stage recorder located at each site. A crest-stage gage is a device which will register the peak stage occurring between inspections of the gage. All stages are elevations above National Geodetic Vertical Datum of 1929 unless otherwise noted. Only the maximum stage is given. Information on some other high stages may have been obtained but is not published herein. The years given in the period of record represent water years for which the annual maximum has been determined.

ANNUAL MAXIMUM STAGES AT TIDAL CREST-STAGE PARTIAL-RECORD STATIONS

Station No.	Station name	Location	Period of record	Annual maximum	
				Date	Elevation NGVD* (feet)
01411395	Cape May Canal at North Cape May, NJ	Lat 38°58'02", long 74°57'25", Cape May County, on Cape May Canal on slip of Cape May, New Jersey to Lewes, Delaware, ferry, 0.5 mi (0.8 km) east of west end of Cape May Canal, and 0.8 mi (1.3 km) south of North Cape May.	1965-80	1-17-80	c5.44
01411409	Delaware Bay at Reeds Beach, NJ	Lat 39°06'32", long 074°53'39", Cape May County, at boat ramp in Cooks Beach, 0.2 mi (0.3 km) south of Reeds Beach, 4.8 mi (7.7 km) northwest of Cape May Court House, and 5.8 mi (9.3 km) north of Villas.	1979-80	1-17-80	5.89
01412150	Maurice River at Bivalve, NJ	Lat 39°13'42", long 75°02'12", Cumberland County, on right bank on bulkhead piling on the south side of Bivalve, and 1.3 mi (2.1 km) south of Port Norris.	1965-80	1-17-80	6.11
01413038	Cohansey River at Greenwich, NJ	Lat 39°23"02", long 075°20'58" Cumberland County, at Greenwich Pier, 0.7 mi (1.1 km) southwest of Greenwich, and 5.8 mi (9.3 km) southwest of Shiloh.	1979-80	1-17-80	4.84
01464040	Delaware River at Marine Terminal, Trenton, NJ	Lat 40°11'21", long 74°45'22", Mercer County, on left bank at downstream end of wharf at Marine Terminal, Trenton, 1.6 mi (2.6 km) downstream from toll bridge on U.S. Route 1, 2.0 mi (3.2 km) downstream from Assunpink Creek, and at channel mile 131.80 (212.07 km).	1921-46‡, 1951-54‡, 1957-80‡	1-25-79 4-15-80	cd9.74 c7.86
01477050	Delaware River at Chester, PA	Lat 39°50'12", long 75°22'00", Delaware County, at end of Reynolds Aluminum Company pier 0.5 mi (0.8 km) downstream from Chester Creek, and at channel mile 82.30 (132.42 km).	1972-77‡, 1979-80	4-15-80	5.95
01483050	Alloway Creek at Hancocks Bridge, NJ	Lat 39°30'31" long 75°27'39", Salem County, on left bank at downstream side of Mill Street bridge in Hancocks Bridge, 0.4 mi (0.6 km) downstream from Lower Alloway Creek and 4.0 mi (6.4 km) south of Salem.	1980	1-17-80	4.62

* National Geodetic Vertical Datum of 1929 (NGVD).
‡ Operated as a continuous-record gaging station.
a Revised.
b Gage datum; not National Geodetic Vertical Datum of 1929 datum.
c Furnished by National Ocean Survey.
d Not previously published.

ANALYSES OF SAMPLES COLLECTED AT SEDIMENT PARTIAL-RECORD STATIONS

SUSPENDED SEDIMENT DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
01412000 - MENANTICO C NR MILLVILLE NJ (LAT 39 25 12 LONG 074 58 00)				
DEC , 1979				
04...	1100	34	23	2.1
01413015 - COHANSEY R AT BRIDGETON NJ (LAT 39 25 54 LONG 075 14 11)				
OCT , 1979				
03...	1230	--	29	--
JAN , 1980				
30...	1330	--	7	--
01438500 - DELAWARE R AT MONTAGUE NJ (LAT 41 18 30 LONG 074 47 50)				
OCT , 1979				
15...	1400	4260	1	12
01439830 - BIG FLAT BK AT TUTTLES CORNER NJ (LAT 41 12 00 LONG 074 48 56)				
OCT , 1979				
15...	1030	--	2	--
MAR , 1980				
12...	0945	41	1	.11
22...	1300	342	9	8.3
MAY				
06...	1000	75	9	1.8
JUL				
21...	1115	10	2	.05
AUG				
14...	0945	E7.4	1	--
01440000 - FLAT BK NR FLATBROOKVILLE NJ (LAT 41 06 24 LONG 074 57 09)				
NOV , 1979				
14...	1630	138	1	.37
JAN , 1980				
22...	1445	66	2	.36
MAR				
05...	0900	35	0	.00
01440200 - DELAWARE R NR DELAWARE WATER GAP, PA. (LAT 41 00 42 LONG 075 05 09)				
NOV , 1979				
15...	1300	4210	1	11
MAR , 1980				
19...	1630	17350	74	3470
01442750 - DELAWARE R AT DUNNFIELD NJ (LAT 40 58 40 LONG 075 08 10)				
AUG , 1980				
26...	1025	1630	2	8.8
01443000 - DELAWARE R AT PORTLAND PA (LAT 40 55 30 LONG 075 05 55)				
OCT , 1979				
16...	0930	--	4	--
MAR , 1980				
25...	0945	--	13	--
JUN				
02...	1000	--	2	--
JUL				
14...	1000	E2520	1	--
AUG				
18...	0930	E2090	2	--

ANALYSES OF SAMPLES COLLECTED AT SEDIMENT PARTIAL-RECORD STATIONS--Continued

SUSPENDED SEDIMENT DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
01443440 - PAULINS KILL AT BALESVILLE NJ (LAT 41 06 20 LONG 074 45 19)				
OCT , 1979				
15...	1200	149	14	5.6
FEB , 1980				
28...	1030	60	11	1.8
MAR				
22...	1455	E709	44	--
APR				
21...	1200	140	188	71
JUN				
02...	1015	92	6	1.5
JUL				
14...	1000	30	6	.49
AUG				
14...	0945	E23	7	--
01443500 - PAULINS KILL AT BLAIRSTOWN NJ (LAT 40 58 44 LONG 074 57 15)				
OCT , 1979				
11...	1000	431	7	8.1
NOV				
20...	1250	185	2	1.0
JAN , 1980				
23...	1045	157	2	.85
MAR				
04...	1530	67	1	.18
20...	1115	366	15	15
JUN				
02...	1145	E170	3	--
JUL				
14...	1115	56	12	1.8
AUG				
14...	1130	40	2	.22
01443900 - YARDS C NR BLAIRSTOWN NJ (LAT 40 58 51 LONG 075 02 25)				
DEC , 1979				
05...	1250	11	4	.12
01444100 - PAULINS KILL AT MOUTH AT COLUMBIA NJ (LAT 40 55 14 LONG 075 05 18)				
OCT , 1979				
11...	1200	530	8	11
MAR , 1980				
04...	1315	--	1	--
05...	1100	--	2	--
APR				
22...	1100	530	15	21
JUN				
02...	1300	--	3	--
JUL				
14...	1315	--	4	--
AUG				
14...	1230	--	4	--
01444800 - DELAWARE R NR RICHMOND PA (BELVIDERE NJ) (LAT 40 49 44 LONG 075 05 06)				
OCT , 1979				
16...	1130	E8160	4	--
MAR , 1980				
25...	1200	E25200	24	--
JUN				
02...	1215	E2860	4	--
JUL				
14...	1145	E2500	5	--
AUG				
18...	1130	E2100	2	--

SUSPENDED SEDIMENT DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

01445430 - PEQUEST RIVER AT TOWNSBURY, NJ (LAT 40 51 06 LONG 074 56 02)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
NOV , 1979				
07...	1240	159	10	4.3
JAN , 1980				
24...	1400	96	5	1.3
MAR				
05...	1330	54	3	.44

01445500 - PEQUEST R AT PEQUEST NJ (LAT 40 49 43 LONG 074 58 45)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
NOV , 1979				
08...	1200	184	6	3.0
JAN , 1980				
24...	1200	124	4	1.3
MAR				
05...	1545	74	2	.40

01446000 - BEAVER BK NR BELVIDERE NJ (LAT 40 50 40 LONG 075 02 48)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
OCT , 1979				
03...	1130	76	14	2.9
MAR , 1980				
05...	0945	--	5	--
APR				
22...	0945	71	6	1.2
JUN				
05...	1230	27	11	.80
JUL				
14...	1040	7.9	5	.11
AUG				
18...	1020	2.9	2	.02

01446400 - PEQUEST R AT BELVIDERE NJ (LAT 40 49 45 LONG 075 04 44)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
OCT , 1979				
03...	1300	319	35	30
MAR , 1980				
10...	1530	135	7	2.6
12...	0940	148	8	3.2
APR				
22...	1230	338	28	26
JUN				
05...	1130	184	13	6.5
JUL				
14...	1130	76	6	1.2
AUG				
18...	1100	59	4	.64

01446500 - DELAWARE R AT BELVIDERE NJ (LAT 40 49 36 LONG 075 05 02)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
MAR , 1980				
10...	1250	4550	3	37

01447000 - DELAWARE R AT NORTHAMPTON ST AT EASTON PA (LAT 40 41 30 LONG 075 12 15)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
OCT , 1979				
17...	0945	--	4	--
MAR , 1980				
26...	0945	--	21	--
JUN				
03...	0945	--	3	--
JUL				
15...	0945	--	4	--
AUG				
19...	0930	--	4	--

ANALYSES OF SAMPLES COLLECTED AT SEDIMENT PARTIAL-RECORD STATIONS--Continued

SUSPENDED SEDIMENT DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
01455100 - LOPATCONG C AT PHILLIPSBURG NJ (LAT 40 40 38 LONG 075 10 13)				
MAR , 1980				
05...	0930	8.0	7	.15
MAY				
07...	1115	14	9	.35
JUN				
03...	1045	13	14	.47
JUL				
15...	1030	9.2	11	.27
AUG				
19...	1130	5.1	10	.14
01455160 - BRASS CASTLE C NR WASHINGTON NJ (LAT 40 45 55 LONG 075 01 07)				
NOV , 1979				
08...	1530	3.9	3	.03
01455300 - POHATCONG C AT CARPENTERSVILLE NJ (LAT 40 37 30 LONG 075 11 10)				
OCT , 1979				
02...	1030	123	59	20
MAR , 1980				
05...	1100	--	6	--
APR				
28...	1215	149	109	44
JUN				
03...	1230	64	6	1.0
JUL				
15...	1130	--	25	--
AUG				
19...	1230	4.5	11	.13
01455500 - MUSCONETCONG R AT OUT OF LAKE HOPATCONG NJ (LAT 40 55 00 LONG 074 39 55)				
OCT , 1979				
09...	1040	110	2	.59
FEB , 1980				
27...	0930	13	1	.03
APR				
21...	1015	95	3	.77
JUN				
04...	1140	40	2	.22
JUL				
15...	1115	80	2	.43
AUG				
13...	0930	9.6	3	.08
01455801 - MUSCONETCONG R AT LOCKWOOD NJ (LAT 40 55 10 LONG 074 44 07)				
OCT , 1979				
09...	1245	216	5	2.9
FEB , 1980				
28...	0900	--	7	--
MAR				
12...	1045	54	3	.44
APR				
21...	1300	222	23	14
JUN				
04...	1040	96	12	3.1
JUL				
15...	1100	22	4	.24
AUG				
13...	1045	22	3	.18

SUSPENDED SEDIMENT DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
01456200 - MUSCONECTONG R AT BEATTYSTOWN NJ (LAT 40 48 48 LONG 074 50 32)				
OCT , 1979				
11...	1030	380	8	8.2
MAR , 1980				
06...	1000	91	4	.98
12...	1330	120	3	.97
MAY				
08...	1145	285	16	12
JUN				
04...	0930	200	16	8.6
JUL				
15...	0940	53	4	.57
AUG				
13...	1215	--	4	--
01457000 - MUSCONETCONG R NR BLOOMSBURY NJ (LAT 40 40 20 LONG 075 03 40)				
OCT , 1979				
31...	1240	181	3	1.5
MAR , 1980				
11...	1230	201	47	26
01457400 - MUSCONETCONG R AT RIEGELSVILLE NJ (LAT 40 35 32 LONG 075 11 20)				
OCT , 1979				
02...	1220	--	24	--
MAR , 1980				
06...	1145	--	6	--
APR				
02...	1200	--	22	--
JUN				
03...	1315	--	18	--
JUL				
15...	1300	--	17	--
AUG				
19...	1215	--	11	--
01458100 - HAKIHOKAKE C AT MILFORD NJ (LAT 40 34 06 LONG 075 05 44)				
OCT , 1979				
02...	1345	--	6	--
FEB , 1980				
13...	0915	--	2	--
APR				
28...	1030	71	60	12
JUN				
04...	0930	20	12	.65
JUL				
21...	1000	--	7	--
AUG				
20...	0920	80	50	11
01458400 - HARIHOKAKE C NR FRENCHTOWN NJ (LAT 40 32 53 LONG 075 04 09)				
OCT , 1979				
11...	1330	--	5	--
FEB , 1980				
13...	1100	--	2	--
MAR				
12...	1530	8.0	4	.09
APR				
28...	0915	19	35	1.8
JUN				
04...	1100	5.4	12	.17
JUL				
21...	1050	2.0	5	.03
AUG				
20...	1000	2.0	42	.23

ANALYSES OF SAMPLES COLLECTED AT SEDIMENT PARTIAL-RECORD STATIONS--Continued

SUSPENDED SEDIMENT DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
01458500 - DELAWARE R AT FRENCHTOWN NJ (LAT 40 31 34 LONG 075 03 55)				
OCT , 1979				
17...	1230	--	6	--
MAR , 1980				
26...	1215	--	28	--
JUN				
04...	0945	--	89	--
JUL				
16...	0945	--	7	--
AUG				
20...	0930	--	5	--
01460500 - DELAWARE AND RARITAN CA AT KINGSTON NJ (LAT 40 22 24 LONG 074 37 08)				
DEC , 1979				
10...	1445	102	4	1.1
MAR , 1980				
04...	1430	114	2	.62
01460880 - LOCKATONG C AT RAVEN ROCK NJ (LAT 40 24 58 LONG 075 01 05)				
FEB , 1980				
06...	0845	--	2	--
APR				
29...	0930	142	22	8.4
JUN				
05...	1010	5.3	3	.04
JUL				
21...	1150	1.2	2	.01
AUG				
20...	1100	1.2	3	.01
01461300 - WICKECHEOKE C AT STOCKTON NJ (LAT 40 24 41 LONG 074 59 13)				
FEB , 1980				
06...	1100	--	1	--
APR				
29...	1030	83	13	2.9
JUN				
04...	1245	9.2	13	.32
JUL				
16...	1300	--	5	--
AUG				
20...	1300	--	2	--
01461900 - ALEXAUKEN C NR LAMBERTVILLE NJ (LAT 40 22 51 LONG 074 56 54)				
MAR , 1980				
12...	1300	25	12	.81
APR				
29...	1145	59	100	16
JUN				
04...	1230	6.8	36	.66
JUL				
17...	0915	3.9	37	.39
AUG				
21...	0845	--	2	--
01462000 - DELAWARE R AT LAMBERTVILLE NJ (LAT 40 21 53 LONG 074 56 57)				
OCT , 1979				
18...	1130	--	7	--
JUN , 1980				
05...	0915	--	31	--
JUL				
17...	0915	--	7	--
AUG				
21...	0915	--	5	--

SUSPENDED SEDIMENT DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT DISCHARGE, SUSPENDED (T/DAY)
01462005 - SWAN CK AT LAMBERTVILLE NJ (LAT 40 21 51 LONG 074 56 41)				
OCT , 1979				
11...	1430	26	5	.35
FEB , 1980				
06...	1245	--	2	--
APR				
29...	1230	25	8	.54
JUN				
05...	0900	10	13	.35
JUL				
17...	1015	9.6	8	.21
AUG				
21...	0915	7.7	1	.02
01462500 - DELAWARE R AT WASHINGTON CROSSING NJ (LAT 40 17 20 LONG 074 52 08)				
OCT , 1979				
16...	1430	--	7	--
MAR , 1980				
27...	1230	--	35	--
JUN				
05...	1045	--	33	--
JUL				
17...	1045	--	8	--
AUG				
21...	1100	--	4	--
01463568 - ASSUNPINK C AT CARSONS MILLS NJ (LAT 40 13 05 LONG 074 33 38)				
JAN , 1980				
28...	1100	13	30	1.1
01463620 - ASSUNPINK C NR CLARKSVILLE NJ (LAT 40 16 11 LONG 074 40 20)				
JAN , 1980				
10...	1315	33	4	.36
31...	1345	38	11	1.1
FEB				
21...	1415	29	3	.23
01464000 - ASSUNPINK C AT TRENTON NJ (LAT 40 13 27 LONG 074 44 58)				
JAN , 1980				
08...	1645	92	11	2.7
FEB				
25...	1425	116	12	3.8
01464500 - CROSSWICKS C AT EXTONVILLE (LAT 40 08 15 LONG 074 36 02)				
JAN , 1980				
29...	1030	97	5	1.3
FEB				
25...	1105	119	7	2.2
01464505 - CROSSWICKS C AT GROVEVILLE NJ (LAT 40 10 26 LONG 074 40 48)				
OCT , 1979				
10...	1300	--	45	--
JAN , 1980				
22...	1145	--	16	--
01464515 - DOCTORS C AT ALLENTOWN NJ (LAT 40 10 37 LONG 074 35 57)				
JAN , 1980				
28...	1400	--	4	--

ANALYSES OF SAMPLES COLLECTED AT SEDIMENT PARTIAL-RECORD STATIONS--Continued

SUSPENDED SEDIMENT DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
01464522 - DOCTORS C AT RT 130 AT YARDVILLE NJ (LAT 40 10 31 LONG 074 40 33)				
JAN , 1980				
22...	1430	--	10	--
01464531 - BLACKS CK AT BORDENTOWN NJ (LAT 40 08 14 LONG 074 42 42)				
OCT , 1979				
01...	1100	--	12	--
JAN , 1980				
29...	1300	--	12	--
01464540 - CRAFTS C AT HEDDING NJ (LAT 40 06 01 LONG 074 45 23)				
OCT , 1979				
02...	1415	--	29	--
JAN , 1980				
30...	1030	--	8	--
01464580 - ASSISCUNK C AT COLUMBUS NJ (LAT 40 03 25 LONG 074 43 27)				
OCT , 1979				
02...	1215	--	28	--
FEB , 1980				
06...	1300	--	11	--
01464590 - ASSISCUNK C NR BURLINGTON NJ (LAT 40 04 19 LONG 074 47 57)				
OCT , 1979				
09...	1100	--	10	--
JAN , 1980				
30...	1300	--	4	--
01465835 - SB RANCOCAS C AT RETREAT (LAT 39 55 23 LONG 074 43 05)				
OCT , 1979				
02...	0930	105	17	4.8
FEB , 1980				
07...	1030	41	8	.89
01465850 - SB RANCOCAS C AT VINCENTOWN NJ (LAT 39 56 22 LONG 074 45 50)				
FEB , 1980				
07...	1330	53	5	.72
01465970 - NB RANCOCAS C AT BROWNS MILLS NJ (LAT 39 58 04 LONG 074 34 48)				
OCT , 1979				
03...	1000	57	3	.46
FEB , 1980				
06...	1030	33	2	.18
01466500 - MCDONALDS B IN LEBANON STATE FOREST NJ (LAT 39 53 05 LONG 074 30 20)				
NOV , 1979				
28...	1400	2.6	1	.01
JAN , 1980				
24...	1300	2.3	1	.01
MAR				
28...	1145	3.3	1	.01
MAY				
28...	1330	2.4	1	.01
JUL				
22...	1130	1.4	1	.00

SUSPENDED SEDIMENT DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
01467000 - NB RANCOCAS C AT PEMBERTON NJ (LAT 39 58 10 LONG 074 41 05)				
OCT , 1979				
03...	1345	185	6	3.0
JAN , 1980				
08...	1400	131	6	2.1
31...	1100	140	2	.76
FEB				
19...	1050	139	2	.75
01467069 - NB PENNSAUKEN C NR MOORESTOWN NJ (LAT 39 57 07 LONG 074 58 10)				
OCT , 1979				
10...	1000	155	30	13
FEB , 1980				
05...	1130	6.6	8	.14
01467081 - SB PENNSAUKEN C AT CHERRY HILL NJ (LAT 39 56 30 LONG 075 00 05)				
OCT , 1979				
04...	1030	19	29	1.5
JAN , 1980				
22...	1100	12	14	.45
FEB				
11...	1315	8.6	18	.42
01467120 - COOPER R AT NORCROSS RD AT LINDENWOLD NJ (LAT 39 49 43 LONG 074 58 55)				
FEB , 1980				
04...	1100	.91	2	.00
01467130 - COOPER R AT KIRKWOOD NJ (LAT 39 50 11 LONG 075 00 06)				
JAN , 1980				
29...	1330	--	7	--
01467140 - COOPER R AT LAWNSIDE NJ (LAT 39 52 14 LONG 075 00 59)				
OCT , 1979				
03...	1300	160	93	40
JAN , 1980				
29...	1100	4.0	22	.24
01467150 - COOPER R AT HADDONFIELD NJ (LAT 39 54 11 LONG 075 01 19)				
DEC , 1979				
07...	1045	43	34	3.9
01467190 - COOPER R AT CAMDEN NJ (LAT 39 55 35 LONG 075 05 03)				
OCT , 1979				
17...	1100	--	22	--
FEB , 1980				
04...	1400	--	13	--
01467329 - SB BIG TIMBER C AT BLACKWOOD TERRACE NJ (LAT 39 48 05 LONG 075 04 27)				
OCT , 1979				
18...	1130	124	18	6.0
JAN , 1980				
30...	1100	35	4	.38

ANALYSES OF SAMPLES COLLECTED AT SEDIMENT PARTIAL-RECORD STATIONS--Continued

SUSPENDED SEDIMENT DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
01467359 - NB BIG TIMBER C AT GLENDORA NJ (LAT 39 50 04 LONG 075 04 02)				
OCT , 1979				
18...	1400	--	14	--
JAN , 1980				
31...	1000	--	15	--
01475000 - MANTUA C AT PITMAN NJ (LAT 39 44 14 LONG 075 06 53)				
FEB , 1980				
06...	0930	9.2	2	.05
01475045 - MANTUA C AT MANTUA NJ (LAT 39 47 42 LONG 075 10 21)				
FEB , 1980				
06...	1300	--	8	--
01477100 - RACCOON C NR MULLICA HILL NJ (LAT 39 42 31 LONG 075 12 05)				
FEB , 1980				
07...	1030	--	2	--
01477510 - OLDMANS C AT PORCHES MILL NJ (LAT 39 41 57 LONG 075 20 01)				
OCT , 1979				
18...	1130	33	13	1.2
FEB , 1980				
14...	1200	10	34	.92
01482500 - SALEM R AT WOODSTOWN NJ (LAT 39 38 36 LONG 075 19 52)				
FEB , 1980				
14...	0900	7.2	5	.10
19...	1230	9.4	5	.13

BURLINGTON COUNTY

395150074284201. Local I.D., Lebanon State Forest 23-D Obs. Unique Well Number, 05-0689.
LOCATION.--Lat 39°51'52", long 74°28'48", Hydrologic Unit 02040202, in Lebanon State Forest, in Woodland Township.
AQUIFER.--Pleistocene-Cohansey Sand undifferentiated.
WELL CHARACTERISTICS.--Drilled water-table observation well, diameter 8 in (203 mm), depth 33 ft (10.06 m), with no screen.
INSTRUMENTATION.--Water-level recorder.
DATUM.--Land-surface datum is 152.00 ft (46.330 m) National Geodetic Vertical Datum of 1929.
Measuring point: Top of 8 inch casing, 0.7 ft (0.21 m) above land-surface datum.
PERIOD OF RECORD.--September 1955 to April 1975, January 1979 to current year. Records for 1955 to 1975 are unpublished and are available in files of New Jersey District Office.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 15.09 ft (4.599 m) below land-surface datum, Sept. 11, 1958; lowest water level, 26.52 ft (8.083 m) below land-surface datum, Feb. 19-20, 1966.
EXTREMES FOR CURRENT YEAR.--Highest water level, 17.79 ft (5.422 m) below land-surface datum, Oct. 1; lowest water level, 21.32 ft (6.498 m) below land-surface datum, Sept. 30.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	17.89	18.64	19.15	19.59	19.90	20.11	19.84	---	18.42	18.90	19.70	20.60
10	18.05	18.69	19.25	19.73	19.87	20.17	19.49	---	18.46	19.01	19.84	20.74
15	18.20	18.78	19.35	19.76	19.92	20.28	19.13	---	18.51	19.15	19.98	20.88
20	18.34	18.89	19.42	19.82	19.95	20.34	---	18.33	18.61	19.27	20.12	21.03
25	18.42	18.98	19.41	19.84	20.00	20.36	---	18.29	18.72	19.40	20.28	21.17
EOM	18.56	19.07	19.55	19.85	20.07	20.16	---	18.37	18.79	19.56	20.45	21.31
MEAN	18.20	18.80	19.33	19.75	19.94	20.24	19.64	18.35	18.56	19.17	20.01	20.90

WTR YR 1980 MEAN 19.44 HIGH 17.79 OCT 1 LOW 21.31 SEP 30

BURLINGTON COUNTY

395525074502501. Local I.D., Medford 5 Obs. Unique Well Number, 05-0261.
LOCATION.--Lat 39°55'25", long 74°50'25", Hydrologic Unit 02040202, at Medford Public Shooting Grounds, Medford Township.
Owner: U.S. Geological Survey.
AQUIFER.--Potomac-Raritan-Magothy aquifer system of Cretaceous age.
WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 6 in (152 mm), depth 750 ft (229 m), screened 740 to 750 ft (226 to 229 m).
INSTRUMENTATION.--Water-level recorder.
DATUM.--Land-surface datum is 72.60 ft (22.128 m) National Geodetic Vertical Datum of 1929.
Measuring point: Top edge of recorder shelf, 3.6 ft (1.10 m) above land-surface datum.
PERIOD OF RECORD.--January 1968 to March 1975, March 1977 to current year. Records for 1968 to 1977 are unpublished and are available in files of New Jersey District Office.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 94.46 ft (28.791 m) below land-surface datum, Mar. 1, 1968; lowest water level, 126.41 ft (38.530 m) below land-surface datum, Sept. 19, 1980.
EXTREMES FOR CURRENT YEAR.--Highest water level, 117.77 ft (35.896 m) below land-surface datum, Mar. 21; lowest water level, 126.41 ft (38.530 m) below land-surface datum, Sept. 19.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	121.09	120.64	119.44	119.01	118.59	118.19	117.99	117.92	119.54	122.65	124.63	125.57
10	121.10	120.20	119.52	119.21	118.38	118.20	117.93	118.17	119.85	122.87	124.55	125.87
15	121.00	120.05	119.58	118.86	118.41	118.30	117.84	118.27	120.14	123.28	124.56	126.13
20	120.92	119.97	119.54	118.80	118.32	118.25	118.02	118.30	120.59	123.85	124.55	126.35
25	120.74	119.84	119.01	118.54	118.27	118.02	117.99	118.29	121.25	124.28	124.63	126.26
EOM	120.89	119.66	119.13	118.57	118.37	118.01	117.99	118.92	122.05	124.57	125.09	126.10
MEAN	120.95	120.10	119.40	118.87	118.41	118.21	118.03	118.27	120.38	123.46	124.64	125.99

WTR YR 1980 MEAN 120.56 HIGH 117.83 APR 23 LOW 126.37 SEP 19

BURLINGTON COUNTY

395524074502501. Local I.D., Medford 1 Obs. Unique Well Number, 05-0258.
LOCATION.--Lat 39°55'24", long 74°50'25", Hydrologic Unit 02040202, at Medford Public Shooting Grounds, Medford Township.
Owner: U.S. Geological Survey.
AQUIFER.--Potomac-Raritan-Magothy aquifer system of Cretaceous age.
WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 6 in (152 mm), depth 410 ft (125.0 m), screened 400 to 410 ft (121.9 to 125.0 m).
INSTRUMENTATION.--Water-level extremes recorder. October 1963 to August 1975, water-level recorder.
DATUM.--Land-surface datum is 70.77 ft (21.571 m) National Geodetic Vertical Datum of 1929.
Measuring point: Front edge of cutout in recorder housing 2.87 ft (0.875 m) above land-surface datum.
PERIOD OF RECORD.--October 1963 to August 1975, February 1977 to current year. Records for 1963 to 1975 are unpublished and are available in files of New Jersey District Office.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 85.22 ft (25.975 m) below land-surface datum, Feb. 16, 19, 1964; lowest water level, 132.78 ft (40.471 m) below land-surface datum, between June 5 and Sept. 18, 1980.
EXTREMES FOR CURRENT YEAR.--Highest water level, 121.31 ft (36.975 m) below land-surface datum, between Mar. 4 and June 5; lowest water level, 132.78 ft (40.471 m) below land-surface datum, between June 5 and Sept. 18.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
DEC 7	122.78	MAR 4	121.80	JUN 5	123.98	SEP 18	132.02

BURLINGTON COUNTY

395524074502502. Local I.D., Medford 2 Obs. Unique Well Number, 05-0259.
LOCATION.--Lat 39°55'24", long 74°50'25", Hydrologic Unit 02040202, at Medford Public Shooting Grounds, Medford Township.
Owner: U.S. Geological Survey.
AQUIFER.--Englishtown Sand of Cretaceous age.
WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 6 in (152 mm), depth 263 ft (80.2 m), screened 253 to 263 ft (77.1 to 80.2 m).
INSTRUMENTATION.--Water-level extremes recorder. October 1963 to August 1975, water-level recorder.
DATUM.--Land-surface datum is 72.92 ft (22.226 m) National Geodetic Vertical Datum of 1929.
Measuring point: Front edge of cutout in recorder housing 3.40 ft (1.036 m) above land-surface datum.
PERIOD OF RECORD.--October 1963 to August 1975, February 1977 to current year. Records for 1963 to 1975 are unpublished and are available in files of New Jersey District Office.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 45.42 ft (13.844 m) below land-surface datum, April 27, 1973; lowest water level, 111.96 ft (34.125 m) below land-surface datum, July 9, 1964.
EXTREMES FOR CURRENT YEAR.--Highest water level, 46.44 ft (14.155 m) below land-surface datum, between Dec. 7 and Mar. 4; lowest water level, 68.10 ft (20.757 m) below land-surface datum, between June 5 and Sept. 18.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
DEC 7	47.65	MAR 4	47.47	JUN 5	46.92	SEP 18	55.46

BURLINGTON COUNTY

395525074502601. Local I.D., Medford 4 Obs. Unique Well Number, 05-0262.
LOCATION.--Lat 39°55'24", long 74°50'25", Hydrologic Unit 02040202, at Medford Public Shooting Grounds, Medford Township.
Owner: U.S. Geological Survey.
AQUIFER.--Potomac-Raritan-Magothy aquifer system of Cretaceous age.
WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 6 in (152 mm), depth 1,145 ft (349.0 m), screened 1,125 to 1,145 ft (342.9 to 349.0 m).
INSTRUMENTATION.--Water-level extremes recorder. January 1968 to July 1975, water-level recorder.
DATUM.--Land-surface datum is 72.32 ft (22.043 m) National Geodetic Vertical Datum of 1929.
Measuring point: Front edge of cutout in recorder housing 2.56 ft (0.780 m) above land-surface datum.
PERIOD OF RECORD.--January 1968 to July 1975, February 1977 to current year. Records for 1968 to 1975 are unpublished and are available in files of New Jersey District Office.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 94.24 ft (28.724 m) below land-surface datum, Mar. 13, 1968; lowest water level, 125.51 ft (38.255 m) below land-surface datum, between June 5 and Sept. 18, 1980.
EXTREMES FOR CURRENT YEAR.--Highest water level, 117.26 ft (35.741 m) below land-surface datum, between Mar. 4 and June 5; lowest water level, 125.51 ft (38.255 m) below land-surface datum, between June 5 and Sept. 18.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
DEC 7	118.78	MAR 4	117.74	JUN 5	118.74	SEP 18	125.43

BURLINGTON COUNTY

400242074422301. Local I.D., Rhodia Corp. 1 Obs. Unique Well Number, 05-0440.

LOCATION.--Lat 40°02'42", long 74°42'23", Hydrologic Unit 02040201, on the lands of Rhodia Corporation near Jobstown. Owner: Rhodia Corporation.

AQUIFER.--Potomac-Raritan-Magothy aquifer system of Cretaceous age.

WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 8 in (203 mm), depth 613 ft (186.8 m), screened 603 to 613 ft (183.8 to 186.8 m).

INSTRUMENTATION.--Water-level extremes recorder. December 1968 to March 1975, water-level recorder.

DATUM.--Land-surface datum is 71.65 ft (21.839 m) National Geodetic Vertical Datum of 1929. Measuring point: Front edge of cutout in recorder housing 2.22 ft (0.677 m) above land-surface datum.

PERIOD OF RECORD.--December 1968 to March 1975, April 1977 to current year. Records for 1968 to 1975 are unpublished and are available in files of New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 86.55 ft (26.380 m) below land-surface datum, Dec. 31, 1969; lowest water level, 104.13 ft (31.739 m) below land-surface datum, between Apr. 28 and Aug. 8, 1977.

EXTREMES FOR CURRENT YEAR.--Highest water level, 96.25 ft (29.337 m) below land-surface datum, between Mar. 4 and May 23; lowest water level, 101.61 ft (30.971 m) below land-surface datum, between Aug. 15, 1979 and Jan. 24, 1980.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JAN 24	97.06	MAR 4	97.13	MAY 23	96.46	JUN 20	97.68	AUG 25	100.29

BURLINGTON COUNTY

400213074510801. Local I.D., Willingboro 1 Obs. Unique Well Number, 05-0063.

LOCATION.--Lat 40°02'13", long 74°51'08", Hydrologic Unit 02040202, located along the west side of Rancocas Road about 2 mi (3.2 km) north of Rancocas. Owner: Willingboro Municipal Utilities Authority.

AQUIFER.--Potomac-Raritan-Magothy aquifer system of Cretaceous age.

WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 6 in (152 mm), depth 294 ft (89.6 m), screened 284 to 294 ft (86.6 to 89.6 m).

INSTRUMENTATION.--Water-level extremes recorder. March 1966 to September 1975, water-level recorder.

DATUM.--Land-surface datum is 45.45 ft (13.853 m) National Geodetic Vertical Datum of 1929. Measuring point: Front edge of cutout in recorder housing, 0.76 ft (0.232 m) above land-surface datum.

PERIOD OF RECORD.--March 1966 to September 1975, February 1977 to current year. Records for 1966 to 1975 are unpublished and are available in files of New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 46.25 ft (14.097 m) below land-surface datum, Mar. 19, 1966; lowest water level, 68.47 ft (20.870 m) below land-surface datum, between July 12 and Sept. 22, 1977.

EXTREMES FOR CURRENT YEAR.--Highest water level, 60.02 ft (18.294 m) below land-surface datum, between Apr. 22 and July 25; lowest water level, 66.48 ft (20.263 m) below land-surface datum, between Apr. 22 and July 25.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JAN 17	60.75	MAR 4	61.28	APR 22	60.70	JUL 25	65.98

BURLINGTON COUNTY

400010074521601. Local I.D., Willingboro 2 Obs. Unique Well Number, 05-0645.

LOCATION.--Lat 40°00'10", long 74°52'16", Hydrologic Unit 02040202, at Bridge Street and Tiffany Lane, Willingboro. Owner: Willingboro Municipal Utilities Authority.

AQUIFER.--Potomac-Raritan-Magothy aquifer system of Cretaceous age.

WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 6 in (152 mm), depth 441 ft (134.4 m), screened 431 to 441 ft (131.4 to 134.4 m).

INSTRUMENTATION.--Water-level recorder.

DATUM.--Land-surface datum is 40.30 ft (12.283 m) National Geodetic Vertical Datum of 1929. Measuring point: Top edge of recorder shelf, 2.0 ft (0.61 m) below land-surface datum.

PERIOD OF RECORD.--March 1966 to March 1975, March 1977 to current year. Records for 1966 to 1975 are unpublished and are available in files of New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 49.79 ft (15.176 m) below land-surface datum, June 21, 1967; lowest water level, 79.00 ft (24.079 m) below land-surface datum, July 29, 1977.

EXTREMES FOR CURRENT YEAR.--Highest water level, 68.73 ft (20.949 m) below land-surface datum, Apr. 29; lowest water level, 78.25 ft (23.851 m) below land-surface datum, July 22.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5		71.31	70.05	70.37	70.35	70.14	---	69.09	71.81	76.13	76.06	76.79
10		71.06	69.83	70.72	70.21	70.11	---	69.60	72.29	76.20	75.88	76.35
15		71.13	70.08	70.47	70.28	70.17	---	69.13	72.69	77.52	75.55	76.73
20		70.76	69.94	70.39	70.28	---	---	69.12	73.26	77.43	75.24	76.15
25		70.48	70.07	70.09	70.32	---	69.29	69.25	75.61	77.23	75.51	76.36
EOM		70.30	70.30	70.24	70.32	---	68.98	70.91	76.47	76.32	76.47	76.20
MEAN		70.91	70.10	70.38	70.28	70.14	---	69.44	73.32	76.88	75.72	76.47

WTR YR 1980 MEAN 72.38 HIGH 68.90 APR 29 LOW 78.11 JUL 22

CAMDEN COUNTY

394922074563301. Local I.D., New Jersey Water Company, Elm Tree Farm 2 Obs. Unique Well Number, 07-0412.

LOCATION.--Lat 39°49'22", long 74°56'30", Hydrologic Unit 02040202, about 200 ft (61.0 m) northeast of Thomas Road and about 2 mi (3.2 km) northwest of Berlin. Owner: New Jersey Water Company.

AQUIFER.--Potomac-Raritan-Magothy aquifer system of Cretaceous age.

WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 6 in (152 mm), depth 1,092 ft (332.8 m), screened 1,082 to 1,092 ft (329.8 to 332.8 m).

INSTRUMENTATION.--Water-level extremes recorder. January 1963 to June 1975, water-level recorder.

DATUM.--Land-surface datum is 148.68 ft (45.318 m) National Geodetic Vertical Datum of 1929. Measuring point: Front edge of cutout in recorder housing 1.76 ft (0.536 m) above land-surface datum.

REMARKS.--Well was originally screened 1,217 to 1,227 ft (370.9 to 374.0 m). Rehabilitated August 1969.

PERIOD OF RECORD.--January 1963 to June 1975, February 1977 to current year. Records for 1963 to 1975 are unpublished and are available in files of New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 166.06 ft (50.615 m) below land-surface datum, July 21, 1965; lowest water level, 223.32 ft (68.068 m) below land-surface datum, between July 15 and Sept. 24, 1980.

EXTREMES FOR CURRENT YEAR.--Highest water level, 207.08 ft (63.118 m) below land-surface datum, between Oct. 10 and Dec. 15; lowest water level, 223.32 ft (68.068 m) below land-surface datum, between July 15 and Sept. 24.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 10	209.14	DEC 15	210.46	FEB 26	211.41	APR 29	211.70	JUL 15	219.59	SEP 24	222.90

CAMDEN COUNTY

394922074563302. Local I.D., NJ WC Elm Tree Farm 3 Obs. Unique Well Number, 07-0413.

LOCATION.--Lat 39°49'22", long 74°56'30", Hydrologic Unit 02040202, about 200 ft (60 m) northeast of Thomas Road and about 2 mi (3 km) northwest of Berlin.

Owner: New Jersey Water Company.

AQUIFER.--Potomac-Raritan-Magothy aquifer system of Cretaceous age.

WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 6 in (152 mm), depth 717 ft (218.5 m), screened 706 to 717 ft (215.2 to 218.5 m).

INSTRUMENTATION.--Water-level recorder.

DATUM.--Land-surface datum is 148.70 ft (45.324 m) National Geodetic Vertical Datum of 1929.

Measuring point: Top edge of recorder shelf, 0.6 ft (0.18 m) above land-surface datum.

PERIOD OF RECORD.--December 1963 to April 1975, March 1977 to current year. Records for 1963 to 1977 are unpublished and are available in files of New Jersey District Office.

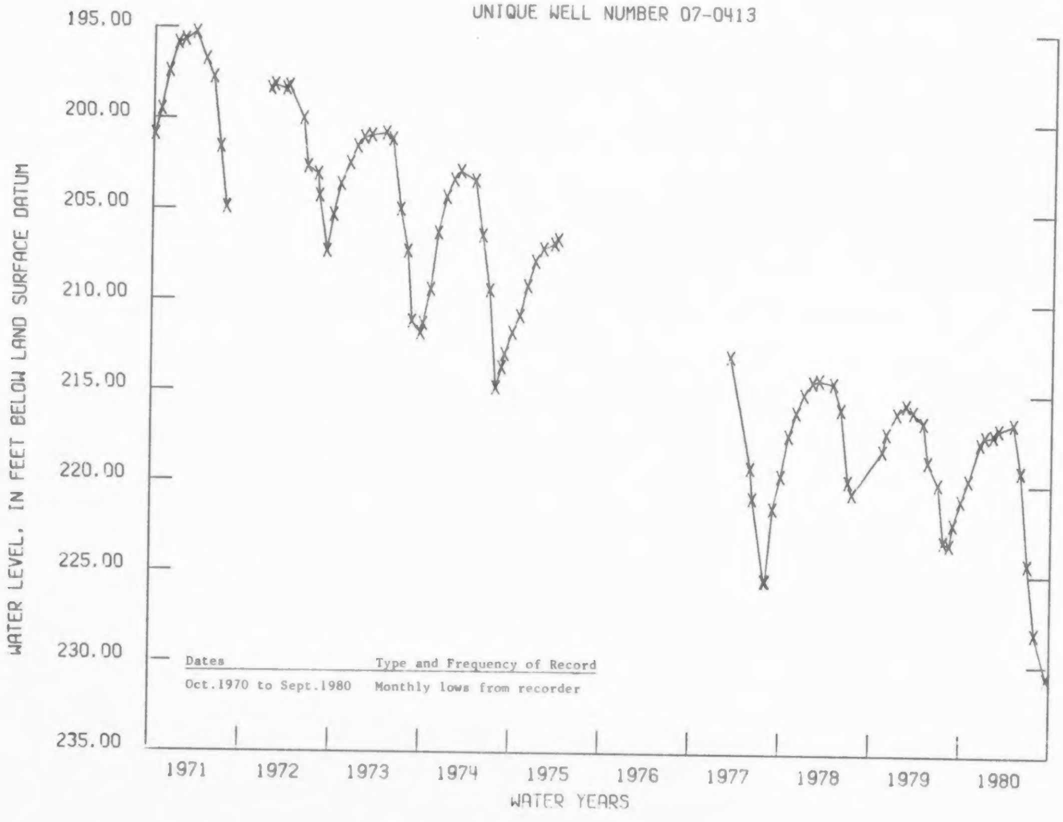
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 174.21 ft (53.099 m) below land-surface datum, Feb. 6, 1964; lowest water level, 230.66 ft (70.305 m) below land-surface datum, Sept. 19-20, 1980.

EXTREMES FOR CURRENT YEAR.--Highest water level, 215.61 ft (65.718 m) below land-surface datum, Apr. 4; lowest water level, 230.66 ft (70.305 m) below land-surface datum, Sept. 19-20.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	220.56	219.47	---	217.25	217.12	216.77	---	216.68	220.04	225.63	228.06	228.93
10	220.28	219.20	---	217.26	217.17	216.62	---	217.22	220.52	225.75	227.59	229.73
15	220.08	218.96	217.66	217.08	217.17	216.49	---	217.67	220.80	226.03	227.36	230.27
20	220.03	218.84	217.52	217.09	217.00	216.51	---	218.04	221.34	227.10	227.17	230.65
25	219.73	---	217.23	216.87	216.88	216.11	---	218.30	222.17	227.90	227.09	230.14
EOM	219.71	---	217.27	217.07	216.82	215.90	216.54	219.14	224.12	228.18	227.80	229.55
MEAN	220.12	219.15	217.41	217.11	217.03	216.46	---	217.69	221.16	226.57	227.52	229.78

WTR YR 1980 MEAN 221.01 HIGH 215.69 APR 4 LOW 230.65 SEP 20



CAMDEN COUNTY

395229074571201. Local I.D., Hutton Hill 1 Obs. Unique Well Number, 07-0117.
LOCATION.--Lat 39°52'29", long 74°57'12", Hydrologic Unit 02040202, about 800 ft (243.8 m) northeast of the intersection Kresson and Cropwell Roads, Cherry Hill Township.
Owner: New Jersey Water Company.
AQUIFER.--Potomac-Raritan-Magothy aquifer system of Cretaceous age.
WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 6 in (152 mm), depth 562 ft (171.3 m), screened 552 to 562 ft (168.2 to 171.3 m).
INSTRUMENTATION.--Water-level extremes recorder. August 1967 to April 1975, water-level recorder.
DATUM.--Land-surface datum is 157.61 ft (48.040 m) National Geodetic Vertical Datum of 1929.
Measuring point: Front edge of cutout in recorder housing 1.89 ft (0.576 m) above land-surface datum.
PERIOD OF RECORD.--August 1967 to April 1975, February 1977 to current year. Records for 1967 to 1975 are unpublished and are available in files of New Jersey District Office.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 200.77 ft (61.195 m) below land-surface datum, Mar. 23, 1968; lowest water level, 250.65 ft (76.398 m) below land-surface datum, between July 15 and Sept. 24, 1980.
EXTREMES FOR CURRENT YEAR.--Highest water level, 229.21 ft (69.863 m) below land-surface datum, between Feb. 26 and Apr. 29; lowest water level, 250.65 ft (76.398 m) below land-surface datum, between July 15 and Sept. 24.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
DEC 15	231.94	FEB 26	230.91	APR 29	231.89	JUL 15	247.13	SEP 24	247.68

CUMBERLAND COUNTY

391828075120902. Local I.D., Jones Island 2 Obs. Unique Well Number, 11-0096.
LOCATION.--Lat 39°18'29", long 75°12'08", Hydrologic Unit 02040206, about 1.7 mi (2.7 km) south of Cedarville at Jones Island, Lawrence Township.
Owner: Cumberland County.
AQUIFER.--Piney Point Formation of Eocene age.
WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 4 in (102 mm), depth 375 ft (114 m), screened 365 to 375 ft (111 to 114 m).
INSTRUMENTATION.--Water-level recorder.
DATUM.--Land-surface datum is 10.10 ft (3.078 m) National Geodetic Vertical Datum of 1929.
Measuring point: Top edge of recorder shelf, 1.9 ft (0.579 m) above land-surface datum.
PERIOD OF RECORD.--March 1977 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 19.99 ft (6.093 m) below land-surface datum, Mar. 22, 1977; lowest water level, 27.93 ft (8.513 m) below land-surface datum, Sept. 29, 1980.
EXTREMES FOR CURRENT YEAR.--Highest water level, 26.12 ft (7.961 m) below land-surface datum, Oct. 5; lowest water level, 27.93 ft (8.513 m) below land-surface datum, Sept. 29.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	26.23	26.65	26.57	26.48	26.82	26.71	26.63	26.62	27.01	27.06	27.39	27.72
10	26.41	26.47	26.75	26.86	26.67	26.74	26.61	26.79	26.95	27.13	27.42	27.70
15	26.57	26.57	26.74	26.59	26.77	26.91	26.49	26.84	26.94	27.27	27.42	27.71
20	26.55	26.61	26.68	26.64	26.71	26.86	26.77	26.82	27.00	27.38	27.47	27.81
25	26.52	26.61	26.36	26.54	26.69	26.63	26.68	26.71	27.15	27.34	27.55	27.72
EOM	26.68	26.62	26.59	26.70	26.83	26.55	26.60	26.93	26.97	27.30	27.60	27.78
MEAN	26.47	26.56	26.64	26.63	26.74	26.77	26.69	26.78	27.02	27.23	27.46	27.74

WTR YR 1980 MEAN 26.89 HIGH 26.23 OCT 5 LOW 27.85 SEP 27 AND OTHERS

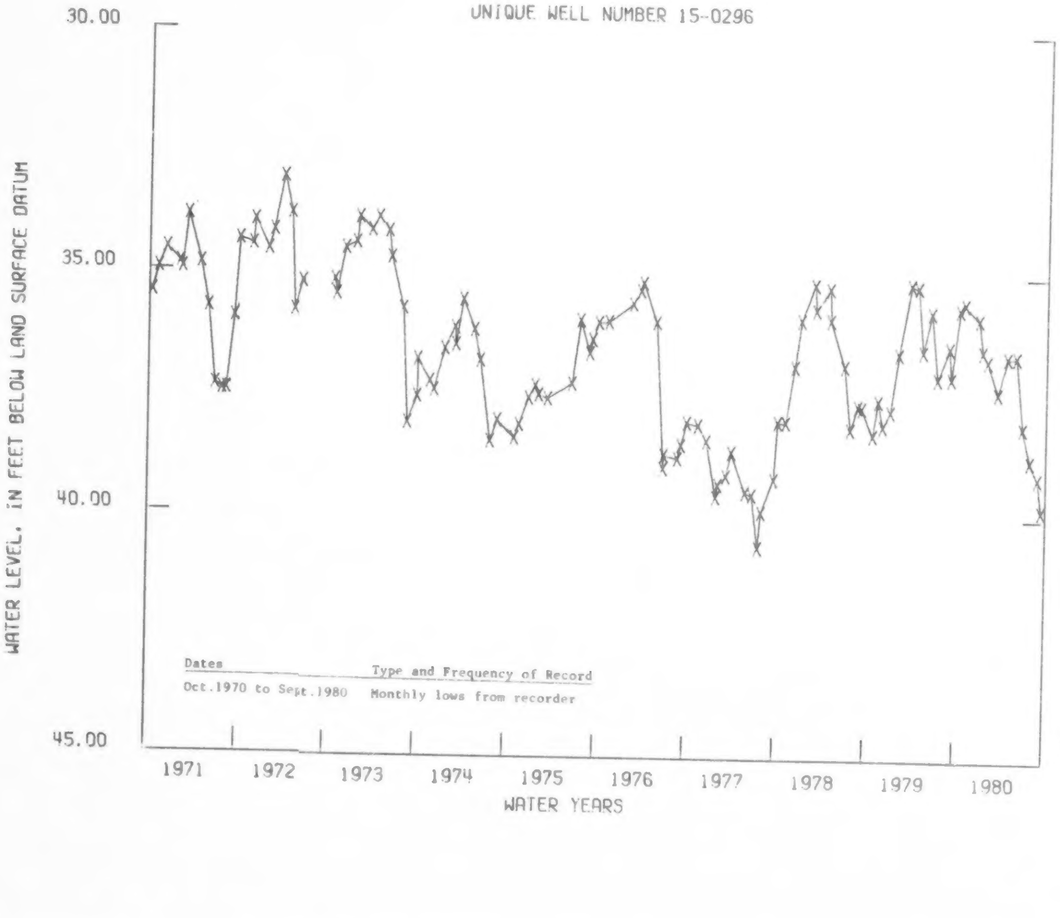
GLOUCESTER COUNTY

394942075131701. Local I.D., Shell Chemical 5 Obs. Unique Well Number, 15-0296.
LOCATION.--Lat 39°49'42", long 75°13'17", Hydrologic Unit 02040202, near the intersection of Mantua Grove Road and Route 295, West Deptford Township.
Owner: Shell Chemical Company.
AQUIFER.--Potomac-Raritan-Magothy aquifer system of Cretaceous age.
WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 6 in (152 mm), depth 327 ft (99.7 m), screened 322 to 327 ft (98.1 to 99.7 m).
INSTRUMENTATION.--Water-level recorder.
DATUM.--Land-surface datum is 20.76 ft (6.328 m) National Geodetic Vertical Datum of 1929.
Measuring point: Top edge of recorder shelf, 2.9 ft (0.88 m) above land-surface datum.
REMARKS.--Water levels in this well are affected by nearby pumping.
PERIOD OF RECORD.--June 1962 to current year. Records for 1962 to 1977 are unpublished and are available in files of New Jersey District Office.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 27.75 ft (8.458 m) below land-surface datum, Dec. 6, 1962; lowest water level, 40.63 ft (12.384 m) below land-surface datum, July 21, 1977.
EXTREMES FOR CURRENT YEAR.--Highest water level, 33.66 ft (10.260 m) below land-surface datum, Dec. 1; lowest water level, 39.82 ft (12.137 m) below land-surface datum, Sept. 12-13.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	34.87	35.03	34.72	35.57	35.98	36.55	35.78	35.46	36.33	37.12	38.07	38.86
10	35.29	34.42	35.10	35.73	36.04	36.60	35.74	35.61	36.33	37.48	38.18	39.30
15	35.05	34.97	35.26	35.65	36.26	36.90	35.66	35.68	36.40	38.36	38.30	39.34
20	35.03	34.98	35.41	35.69	36.19	36.65	36.16	35.42	36.42	38.00	38.17	39.10
25	35.37	35.03	35.24	35.42	36.19	36.55	36.41	35.48	37.46	38.04	38.41	39.04
EOM	35.25	33.96	35.64	35.76	36.45	36.14	35.82	36.32	37.37	37.99	38.70	38.58
MEAN	35.15	34.76	35.18	35.68	36.13	36.60	36.00	35.64	36.68	37.86	38.25	39.08

WTR YR 1980 MEAN 36.42 HIGH 33.96 NOV 30 LOW 39.59 SEP 13



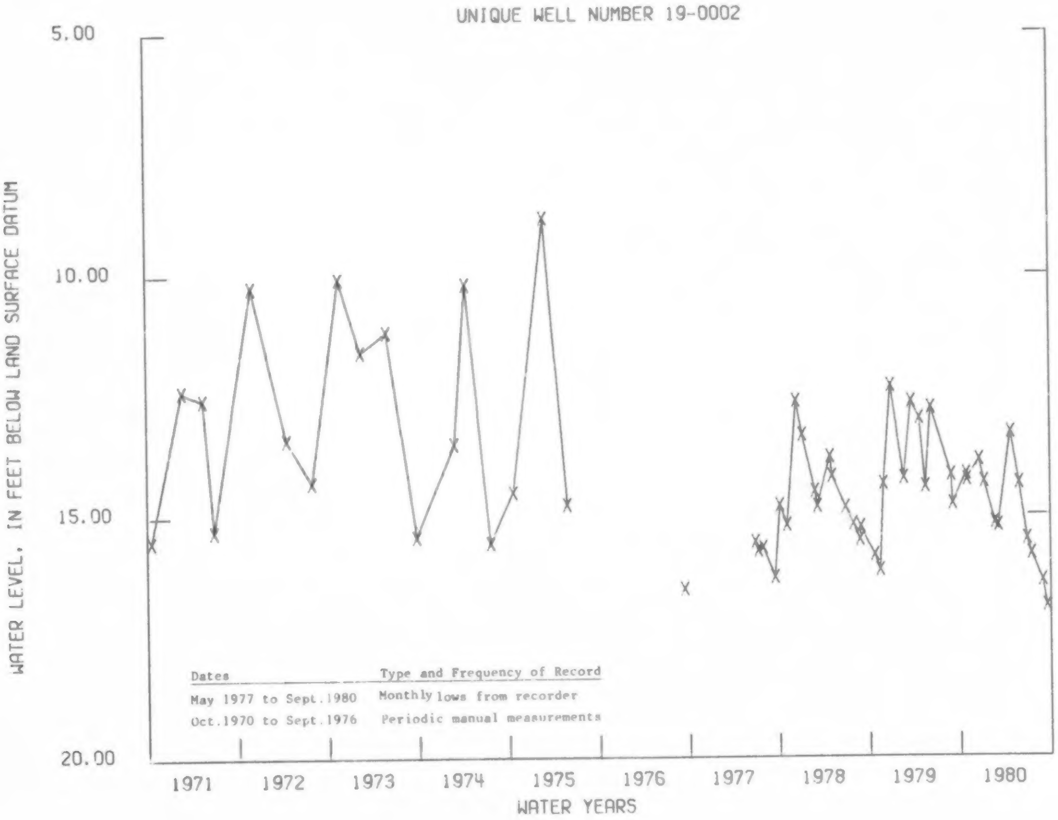
HUNTERDON COUNTY

402644074563601. Local I.D., Bird Obs. Unique Well Number, 19-0002.
LOCATION.--Lat 40°26'44", long 74°56'36", Hydrologic Unit 02040105, at U.S. Post Office, Sergeantsville.
Owner: Phillip Fleming.
AQUIFER.--Stockton Formation of Triassic age.
WELL CHARACTERISTICS.--Dug water-table observation well, diameter 36 in (914 mm), depth 21 ft (6.4 m), lined with stone.
INSTRUMENTATION.--Water-level recorder.
DATUM.--Land-surface datum is 342.00 ft (104.242 m) National Geodetic Vertical Datum of 1929.
Measuring point: Top edge of recorder shelf, 1.5 ft (0.46 m) above land-surface datum.
PERIOD OF RECORD.--June 1965 to July 1970, May 1977 to current year. Periodic manual measurements, September 1970 to September 1976. Records for 1965 to 1970 are unpublished and are available in files of New Jersey District Office.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 6.91 ft (2.106 m) below land-surface datum, Mar. 28-29, 1978 and Apr. 2, 1980; lowest water level, 16.88 ft (5.145 m) below land-surface datum, Sept. 18-20, 1980.
EXTREMES FOR CURRENT YEAR.--Highest water level, 6.91 ft (2.106 m) below land-surface datum, Apr. 2; lowest water level, 16.88 ft (5.145 m) below land-surface datum, Sept. 18-20.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	10.53	11.77	13.28	13.65	14.34	15.14	7.41	12.02	14.13	15.60	15.45	16.46
10	11.29	12.40	13.54	14.24	14.69	14.95	8.68	12.80	14.46	15.68	15.48	16.64
15	10.58	11.94	13.49	12.35	15.00	13.77	9.73	12.37	14.77	15.77	15.82	16.80
20	12.09	12.72	13.52	---	15.07	10.67	11.56	13.14	15.14	15.62	16.02	16.87
25	13.31	13.61	---	---	14.77	7.82	12.89	13.43	15.35	15.53	16.18	16.78
EOM	14.11	12.56	12.80	13.79	14.84	8.17	11.49	14.31	15.49	15.62	16.35	16.75
MEAN	11.80	12.68	13.32	13.39	14.73	12.10	10.10	12.90	14.83	15.64	15.85	16.69

WTR YR 1980 MEAN 13.68 HIGH 6.95 APR 2 LOW 16.88 SEP 19



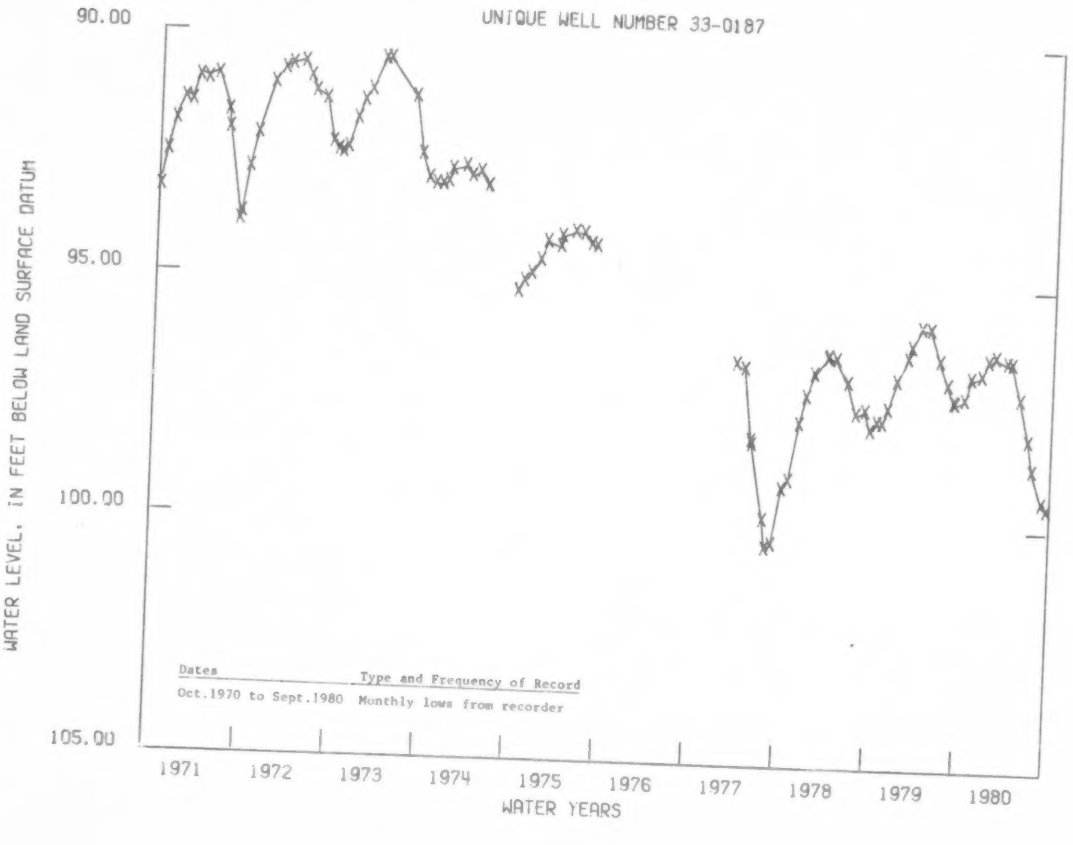
SALEM COUNTY

394037075191501. Local I.D., Point Airy Obs. Unique Well Number, 33-0187.
LOCATION.--Lat 39°40'37", long 75°19'14", Hydrologic Unit 02040206, at intersection of Point Airy and Woodstown-Swedesboro Roads, 1 mi (1.61 km) north of Woodstown Borough boundary.
Owner: U.S. Geological Survey.
AQUIFER.--Potomac-Raritan-Magothy aquifer system of Cretaceous age.
WELL CHARACTERISTICS.--Drilled artesian observtion well, diameter 6 in (152 mm), depth 672 ft (204.8 m), screened 664 to 672 ft (202.4 to 204.8 m).
INSTRUMENTATION.--Water-level recorder.
DATUM.--Land-surface datum is 73.00 ft (22.250 m) National Geodetic Vertical Datum of 1929.
Measuring point: Top of 6 inch casing, 1.8 ft (0.55 m) above land-surface datum.
PERIOD OF RECORD.--February 1959 to August 1975, March 1977 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 78.55 ft (23.942 m) below land-surface datum, Mar. 6, 1959; lowest water level, 100.52 ft (30.638 m) below land-surface datum, Aug. 6-7, 1977.
EXTREMES FOR CURRENT YEAR.--Highest water level, 95.86 ft (29.218 m) below land-surface datum, Mar. 25; lowest water level, 99.58 ft (30.352 m) below land-surface datum, Sept. 19.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	96.87	96.79	96.54	96.29	96.19	96.21	96.06	96.45	97.21	97.82	98.40	99.36
10	97.14	96.59	96.52	96.43	96.11	96.13	96.20	96.60	96.92	97.88	98.54	99.25
15	97.08	96.53	96.76	96.13	96.23	96.37	96.03	96.74	96.97	98.32	98.67	99.17
20	97.10	96.58	96.69	96.15	96.02	96.36	96.32	96.60	97.18	98.55	98.67	99.31
25	96.95	96.57	96.11	96.11	96.05	96.03	96.30	97.07	97.50	98.43	98.89	99.32
EOM	96.85	96.67	96.21	96.21	96.34	96.05	96.21	97.00	97.87	98.50	99.10	99.11
MEAN	97.00	96.62	96.49	96.21	96.17	96.24	96.25	96.68	97.23	98.20	98.73	99.22

WTR YR 1980 MEAN 97.09 HIGH 95.94 JAN 22 LOW 99.49 SEP 19



WARREN COUNTY

405050075033201. Local I.D., Hoffmann LaRoche 4 Obs. Unique Well Number, 41-0013.

LOCATION.--Lat 40°50'50", long 75°03'32", Hydrologic Unit 02040105, 1 mi (1.6 km) northeast of Belvidere on Route 46. Owner: Hoffmann LaRoche, Inc.

AQUIFER.--Glacial till of Pleistocene age.

WELL CHARACTERISTICS.--Drilled semi-artesian observation well, diameter 8 in (203 mm), depth 128 ft (39.0 m).

INSTRUMENTATION.--Water-level recorder.

DATUM.--Land-surface datum is 290.30 ft (88.483 m) National Geodetic Vertical Datum of 1929. Measuring point: Top edge of recorder shelf, 2.2 ft (0.67 m) above land-surface datum.

PERIOD OF RECORD.--September 1960 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 30.10 ft (9.174 m) below land-surface datum, July 5, 1972; lowest water level, 46.59 ft (14.201 m) below land-surface datum, Sept. 18, 1977.

EXTREMES FOR CURRENT YEAR.--Highest water level, 34.53 ft (10.525 m) below land-surface datum, Apr. 22-23; lowest water level, 45.17 ft (13.768 m) below land-surface datum, Oct. 1.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	44.71	43.46	42.49	41.83	43.27	44.38	37.55	35.36	38.76	40.61	41.83	42.66
10	43.93	43.23	42.50	42.19	43.63	44.39	36.36	35.77	39.18	40.75	41.95	42.77
15	43.36	43.30	42.80	42.58	43.90	43.86	35.36	36.33	39.53	41.08	42.13	42.89
20	43.16	43.43	42.97	42.93	44.15	43.25	34.67	36.95	39.87	41.28	42.29	42.96
25	43.23	43.20	42.88	43.21	44.26	41.66	34.60	37.50	40.18	41.39	42.42	43.04
EOM	43.48	42.82	42.20	43.29	44.35	39.06	35.21	38.25	40.44	41.63	42.55	43.13
MEAN	43.73	43.31	42.69	42.62	43.83	43.03	35.86	36.54	39.52	41.05	42.15	42.87

WTR YR 1980 MEAN 41.43 HIGH 34.54 APR 23 LOW 45.13 OCT 1

QUALITY OF GROUND WATER

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

CAMDEN COUNTY

WELL NUMBER	LOCAL IDENT-I-FIER	LAT-I-TUDE	LONG-I-TUDE	SEQ. NO.	GEO-LOGIC UNIT	DATE OF SAMPLE	TEMPER-ATURE, WATER (DEG C)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)
8	BELLMAWR BORO WD 4	39 51 46	075 05 42	01	211MGRR	80-07-02	14.0	189	7.3	2.7
12	BELLMAWR BORO WD 3	39 52 19	075 06 38	01	211MGRR	80-07-02	14.5	208	7.2	5.9
13	BELLMAWR BORO WD 1	39 52 20	075 06 36	01	211MGRR	80-07-02	13.5	243	7.2	3.8
517	BROOKLAWN BORO WD 4-67	39 52 43	075 07 24	01	211MGRR	80-08-27	15.0	662	6.8	26
194	NJ ZINC CO 4-DEEP	39 53 08	075 07 44	01	211MGRR	80-07-03	14.5	480	6.4	24
195	NJ ZINC CO 5-DEEP	39 53 08	075 07 49	01	211MGRR	80-07-03	14.0	605	6.5	30
210	GLOUCESTER CITY WD 42	39 53 43	075 06 52	01	211MGRR	80-07-07	15.0	250	6.2	21
221	GLOU CITY CG BASE-USGS 1	39 53 55	075 07 38	01	211MGRR	80-07-23	15.5	403	6.8	16
553	GLOU CITY CG BASE-USGS 2	39 53 55	075 07 38	02	211MGRR	80-07-23	14.5	228	6.6	17
46	CAMDEN CITY WD-CITY 11	39 55 12	075 06 40	01	211MGRR	80-07-30	16.0	478	6.0	31
61	CAMDEN CITY WD-CITY 4	39 55 41	075 06 22	01	211MGRR	80-07-30	16.0	845	6.2	71
64	CAMDEN CITY WD-CITY 17	39 55 46	075 05 33	01	211MGRR	80-07-30	14.5	271	5.7	22
68	CAMDEN CITY WD-CITY 13	39 55 57	075 05 35	01	211MGRR	80-07-30	14.5	557	5.8	50
78	CAMDEN CITY WD-CITY 5N	39 56 15	075 06 33	01	211MGRR	80-07-31	16.0	394	5.9	34
94	CAMDEN CITY WD-CITY 16	39 57 06	075 05 53	01	211MGRR	80-07-31	16.0	1150	6.7	91
98	NEW JERSEY WC-CAMDEN 52	39 57 15	075 05 19	01	211MGRR	80-08-21	14.5	432	5.7	39
110	NEW JERSEY WC-CAMDEN 49	39 57 25	075 05 21	01	211MGRR	80-08-21	15.0	624	6.7	15
367	CAMDEN CITY WD-PUCHACK 3	39 58 40	075 03 01	01	211MGRR	80-07-21	16.0	240	6.3	23
368	CAMDEN CITY WD-DELAIR 1	39 58 48	075 03 47	01	211MGRR	80-07-22	15.5	278	6.2	21
535	CAMDEN CITY WD TW1 79	39 58 57	075 03 44	01	211MGRR	80-07-28	17.0	212	6.7	16
373	CAMDEN CITY WD-MORRIS 6	39 59 02	075 03 18	01	211MGRR	80-07-22	14.5	268	5.9	23
379	CAMDEN CITY WD MORRIS 10	39 59 20	075 03 03	01	211MGRR	80-07-21	14.5	456	6.6	51
386	CAMDEN CITY WD MORRIS 3A	39 59 34	075 02 29	01	211MGRR	80-07-22	15.5	744	6.1	43

LOCAL IDENT-I-FIER	DATE OF SAMPLE	ELEV. OF LAND SURFACE DATUM (FT. NGVD)	DEPTH OF WELL, TOTAL (FEET)
BELLMAWR BORO WD 4	80-07-02	82.00	557
BELLMAWR BORO WD 3	80-07-02	31.00	356
BELLMAWR BORO WD 1	80-07-02	31.00	160
BROOKLAWN BORO WD 4-67	80-08-27	13.00	321
NJ ZINC CO 4-DEEP	80-07-03	5.00	279
NJ ZINC CO 5-DEEP	80-07-03	5.00	175
GLOUCESTER CITY WD 42	80-07-07	15.00	306
GLOU CITY CG BASE-USGS 1	80-07-23	20.00	170
GLOU CITY CG BASE-USGS 2	80-07-23	20.00	89
CAMDEN CITY WD-CITY 11	80-07-30	13.00	159
CAMDEN CITY WD-CITY 4	80-07-30	41.00	162
CAMDEN CITY WD-CITY 17	80-07-30	34.00	270
CAMDEN CITY WD-CITY 13	80-07-30	30.00	225
CAMDEN CITY WD-CITY 5N	80-07-31	22.00	171
CAMDEN CITY WD-CITY 16	80-07-31	23.00	179
NEW JERSEY WC-CAMDEN 52	80-08-21	18.00	200
NEW JERSEY WC-CAMDEN 49	80-08-21	9.00	169
CAMDEN CITY WD-PUCHACK 3	80-07-21	10.00	175
CAMDEN CITY WD-DELAIR 1	80-07-22	10.00	138
CAMDEN CITY WD TW1 79	80-07-28	10.00	132
CAMDEN CITY WD-MORRIS 6	80-07-22	8.00	138
CAMDEN CITY WD MORRIS 10	80-07-21	16.00	115
CAMDEN CITY WD MORRIS 3A	80-07-22	17.00	107

Geologic unit (aquifer):
211MGRR - Potomac-Raritan-Magothy aquifer system

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

CAPE MAY COUNTY

WELL NUMBER	LOCAL IDENT-I-FIER	LAT-I-TUDE	LONG-I-TUDE	SEQ. NO.	GEO-LOGIC UNIT	DATE OF SAMPLE	TEMPER-ATURE, WATER (DEG C)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)
28	HARBESON-WALKER REF CO 2	38 56 43	074 57 55	01	121CNSY	80-08-27	15.5	950	7.4	200
36	CAPE MAY CITY WD 2	38 57 01	074 55 28	01	121CNSY	80-08-27	15.0	416	7.4	54
43	CAPE MAY CITY WD 3	38 57 24	074 55 21	01	121CNSY	80-08-27	15.0	295	7.4	17
52	LOWER TWP MUA 1	38 58 53	074 57 12	01	121CNSY	80-08-27	15.0	245	7.7	13
57	LOWER TWP MUA 3	38 59 19	074 55 18	01	121CNSY	80-08-27	15.5	175	7.7	7.3
67	WILDWOOD WD RIO GRAND 38	39 01 35	074 53 52	01	122KRKD	80-08-22	16.5	510	7.8	75
70	WILDWOOD WD RIO GRAND 36	39 01 37	074 53 52	01	112CPMY	80-08-22	13.5	200	6.3	22
72	WILDWOOD WD RIO GRAND 31	39 01 38	074 53 50	01	112ESRNS	80-08-22	13.5	183	7.5	12
74	WILDWOOD WD RIO GRAND 29	39 01 39	074 53 49	02	121CNSY	80-08-22	14.0	154	7.5	11
-	WILDWOOD WD RIO GRAND 42	39 01 59	074 53 37	01	121CNSY	80-08-22	14.0	145	7.5	10

LOCAL IDENT-I-FIER	DATE OF SAMPLE	ELEV. OF LAND SURFACE DATUM (FT. NGVD)	DEPTH OF HOLE, TOTAL (FEET)	DEPTH OF WELL, TOTAL (FEET)	DEPTH TO TOP OF WATER-BEARING ZONE (FT)	DEPTH TO BOT-TOM OF WATER-BEARING ZONE (FT)	DEPTH TO TOP OF SAMPLE INTER-VAL (FT)	DEPTH TO BOT-TOM OF SAMPLE INTER-VAL (FT)	PUMP OR FLOW PERIOD PRIOR TO SAM-PLING (MIN)	FLOW RATE, INSTAN-TANEOUS (GPM)
HARBESON-WALKER REF CO 2	80-08-27	10.00	270	268	200	--	235	265	180	650
CAPE MAY CITY WD 2	80-08-27	12.00	322	282	--	--	174	282	180	800
CAPE MAY CITY WD 3	80-08-27	15.00	--	276	--	--	--	276	180	800
LOWER TWP MUA 1	80-08-27	18.00	285	262	200	--	241	262	10	800
LOWER TWP MUA 3	80-08-27	20.00	--	307	--	--	262	302	120	850
WILDWOOD WD RIO GRAND 38	80-08-22	10.00	592	592	--	--	461	590	300	900
WILDWOOD WD RIO GRAND 36	80-08-22	9.00	63	63	--	--	48	63	300	300
WILDWOOD WD RIO GRAND 31	80-08-22	10.00	141	135	92	139	108	135	300	290
WILDWOOD WD RIO GRAND 29	80-08-22	8.00	258	244	--	--	191	231	300	800
WILDWOOD WD RIO GRAND 42	80-08-22	10.00	--	250	--	--	--	--	300	950

Geologic unit (aquifer):
112CPMY - Cape May Formation, Undifferentiated
112ESRNS - Cape May Formation, Estuarine Sand Facies
121CNSY - Cohansey Sand
122KRKD - Kirkwood Formation

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

CUMBERLAND COUNTY

WELL NUMBER	LOCAL IDENT- I- FIER	LAT- I- TUDE	LONG- I- TUDE	SEQ. NO.	GEO- LOGIC UNIT	DATE OF SAMPLE	TEMPER- ATURE, WATER (DEG C)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH FIELD (UNITS)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)
52	FORTESCUE REALTY 4	39 14 20	075 10 23	02	122KRKD	80-09-04	--	220	8.0	5.4
54	M GANDYS BEACH	39 16 18	075 13 54	01	124PNPN	80-09-04	15.5	3220	7.3	930
256	H MYERS	39 16 19	075 13 57	01	124PNPN	80-09-04	--	600	--	91
56	MONEY ISL MARINA 1	39 17 04	075 14 15	01	124PNPN	80-09-04	--	675	--	74
100	CED.BK.FARMS-HOWELL 1-60	39 18 43	075 13 37	01	121CKKD	80-09-04	13.5	720	5.1	40
2	BRIDGETON CITY WD 2R	39 24 30	075 13 13	01	121CKKD	80-09-05	14.0	126	5.3	8.1

LOCAL IDENT- I- FIER	DATE OF SAMPLE	ELEV. OF LAND SURFACE DATUM (FT. NGVD)	DEPTH OF HOLE, TOTAL (FEET)	DEPTH OF WELL, TOTAL (FEET)	DEPTH TO TOP OF SAMPLE INTER- VAL (FT)	DEPTH TO BOT- TOM OF SAMPLE INTER- VAL (FT)	PUMP OR FLOW PERIOD PRIOR TO SAM- PLING (MIN)	FLOW RATE, INSTAN- TANEOUS (GPM)
FORTESCUE REALTY 4	80-09-04	8.00	--	303	283	303	10	200
M GANDYS BEACH	80-09-04	5.00	--	402	378	402	10	50
H MYERS	80-09-04	5.00	--	400	--	--	--	--
MONEY ISL MARINA 1	80-09-04	4.00	--	370	350	370	--	--
CED.BK.FARMS-HOWELL 1-60	80-09-04	10.00	--	74	48	73	--	--
BRIDGETON CITY WD 2R	80-09-05	20.00	107	101	76	101	180	700

Geologic unit (aquifer):
121CKKD - Cohansey Sand - Kirkwood Formation, undifferentiated
122KRKD - Kirkwood Formation
124PNPN - Piney Point Formation

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

GLOUCESTER COUNTY

WELL NUMBER	LOCAL IDENT- I- FIER	LAT- I- TUDE	LONG- I- TUDE	SEQ. NO.	GEO- LOGIC UNIT	DATE OF SAMPLE	TEMPER- ATURE, WATER (DEG C)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH FIELD (UNITS)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)
1	CLAYTON BORO WD 3	39 39 12	075 05 22	01	211MGRR	80-09-17	21.0	910	--	110
3	CLAYTON BORO WD 4	39 40 13	075 05 58	01	211MGRR	80-09-17	20.0	850	--	98
361	GLASSBORO BORO WD 5	39 41 41	075 07 10	01	211MGRR	80-09-17	19.0	627	--	58
63	GLASSBORO BORO WD 4	39 43 08	075 07 02	01	211MGRR	80-09-17	18.5	494	--	29
248	WASHINGTON TWP MUA 5-73	39 43 39	075 04 33	01	211MGRR	80-09-17	19.5	382	--	9.0
-	PITMAN BORO WD P4	39 43 45	075 08 04	01	211MGRR	80-09-17	17.5	560	--	43
130	SO JERSEY WS CO 3	39 44 08	075 13 30	02	211MGRR	80-09-17	17.0	1010	--	160
226	PITMAN BORO WD P2	39 44 11	075 07 45	01	211MGRR	80-09-17	17.0	429	--	27
253	WASHINGTON TWP MUA 6-64	39 44 37	075 02 50	01	211MGRR	80-09-17	20.0	294	--	3.3
236	SWEDESBORO BORO WD 3	39 44 34	075 18 43	01	211MGRR	80-09-10	15.5	384	7.2	43
137	PURELAND WC 2 (3-1973)	39 45 35	075 20 54	01	211MGRR	80-09-26	14.0	206	6.2	17
350	PURELAND WC LANDTECT 1	39 45 50	075 23 13	01	211MGRR	80-09-30	14.5	1500	7.3	370
189	SEWELL WC 1	39 46 02	075 08 23	01	211MGRR	80-08-04	18.0	403	7.9	26
139	PURELAND WC TEST WELL3	39 46 08	075 21 35	01	211MGRR	80-09-26	14.0	2930	7.4	810
144	PURELAND WC 1-1973	39 46 13	075 21 29	01	211MGRR	80-09-26	13.0	158	5.8	34
8	WOODBURY CTY WD-SEWEL 2A	39 46 28	075 08 13	03	211MGRR	80-08-27	15.0	384	8.1	25
191	SEWELL WC 2	39 46 29	075 08 59	01	211MGRR	80-08-04	15.0	403	7.9	26
193	MANTUA WC 2	39 47 12	075 10 08	01	211MGRR	80-08-04	15.0	403	7.8	31
194	MANTUA WC 3	39 47 32	075 10 36	01	211MGRR	80-08-04	15.5	432	7.8	40
159	MONSANTO CHEM EAST 1	39 47 36	075 23 44	01	211MGRR	80-09-23	14.0	1320	6.5	360
274	WENONAH BORO WD 1	39 47 43	075 09 02	01	211MGRR	80-08-04	15.0	336	7.8	22
166	PENNS GROVE WC-BRIDGPT 2	39 47 55	075 21 08	02	211MGRR	80-09-16	14.5	186	5.1	13
167	MONSANTO CHEM 3	39 47 27	075 23 19	01	211MGRR	80-09-23	14.0	678	6.3	180
355	E GREENWICH TWP WD 3	39 48 22	075 12 47	01	211MGRR	80-09-05	15.5	499	7.9	57
399	ALLIED ENERGY 1 1977	39 49 00	075 19 13	01	211MGRR	80-09-15	14.5	118	5.1	29
283	SHELL CHEM CO 3	39 49 19	075 12 56	01	211MGRR	80-09-24	15.0	690	7.8	140
284	SHELL CHEM CO 4	39 49 19	075 12 56	02	211MGRR	80-09-24	14.0	384	7.4	26
69	GREENWICH TWP WD 3	39 49 19	075 16 02	01	211MGRR	80-09-18	13.5	121	5.2	13
348	GREENWICH TWP WD 6	39 49 10	075 15 41	01	211MGRR	80-09-18	14.0	128	4.4	7.0
210	PAULSBORO WD 6-73	39 49 21	075 14 17	01	211MGRR	80-09-11	15.0	261	6.0	34
212	PAULSBORO WD 4-51	39 49 29	075 14 47	01	211MGRR	80-09-11	15.0	146	4.8	13
72	EI DUPONT REPAUNO 3	39 49 36	075 17 47	01	211MGRR	80-09-12	13.5	221	5.2	32
76	HERCULES CHEM 4-1970	39 49 39	075 17 04	01	211MGRR	80-09-15	15.0	393	6.6	16
79	EI DUPONT REPAUNO 6	39 49 44	075 17 34	01	211MGRR	80-09-12	14.0	480	5.6	97
81	EI DUPONT REPAUNO 5	39 49 45	075 17 17	01	211MGRR	80-09-12	20.0	365	5.7	72
331	WOODBURY WD RAILROAD 5	39 49 55	075 09 08	01	211MGRR	80-08-27	15.0	360	7.9	45
213	PAULSBORO WD 5-57	39 49 47	075 14 16	01	211MGRR	80-09-11	16.0	235	4.5	19
94	MOBIL OIL-GREENWICH 44	39 49 58	075 15 12	01	211MGRR	80-09-17	16.0	653	5.5	45
98	MOBIL OIL-GREENWICH 45	39 50 05	075 15 23	01	211MGRR	80-09-17	14.0	2420	5.1	110
332	WOODBURY WD-PARK LOT 3	39 50 17	075 09 28	01	211MGRR	80-08-27	14.5	336	7.8	12
118	MOBIL OIL-GREENWICH 47	39 50 36	075 15 01	01	211MGRR	80-09-17	15.0	490	6.1	110
207	NATIONAL PARK BORO WD 2	39 51 56	075 10 53	01	211MGRR	80-09-09	14.0	321	7.1	28
317	TEXACO EAGLE PT 7	39 52 00	075 09 47	01	211MGRR	80-09-09	15.0	238	6.2	20
326	WESTVILLE BORO WD 5	39 52 16	075 07 39	01	211MGRR	80-09-02	14.5	510	7.1	13
320	TEXACO EAGLE PT 1	39 52 16	075 09 15	01	211MGRR	80-09-09	15.0	344	7.2	25
327	WESTVILLE BORO WD 4	39 52 21	075 07 37	01	211MGRR	80-09-02	15.5	284	7.4	9.5
321	TEXACO EAGLE PT 5	39 52 21	075 08 56	01	211MGRR	80-09-09	15.0	365	7.1	15
410	TEXACO EAGLE PT 4A	39 52 13	075 09 36	02	211MGRR	80-09-09	14.5	480	6.8	29

Geologic unit (aquifer):
211MGRR - Potomac-Raritan-Magothy aquifer system

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

GLOUCESTER COUNTY--Continued

LOCAL IDENT-I-FIER	DATE OF SAMPLE	ELEV. OF LAND SURFACE DATUM (FT. NGVD)	DEPTH OF HOLE, TOTAL (FEET)	DEPTH OF WELL, TOTAL (FEET)	DEPTH TO TOP OF WATER-BEARING ZONE (FT)	DEPTH TO BOT-TOM OF WATER-BEARING ZONE (FT)	DEPTH TO TOP OF SAMPLE INTER-VAL (FT)	DEPTH TO BOT-TOM OF SAMPLE INTER-VAL (FT)	PUMP OR FLOW PERIOD PRIOR TO SAM-PLING (MIN)	FLOW RATE, INSTAN-TANEOUS (GPM)
CLAYTON BORO WD 3	80-09-17	133.00	1010	800	740	802	746	800	10	700
CLAYTON BORO WD 4	80-09-17	140.00	943	741	657	778	670	740	10	1200
GLASSBORO BORO WD 5	80-09-17	138.00	--	660	--	--	600	657	120	1000
GLASSBORO BORO WD 4	80-09-17	146.00	--	599	--	--	549	599	10	450
WASHINGTON TWP MUA 5-73	80-09-17	125.00	--	618	--	--	559	618	180	1000
PITMAN BORO WD P4	80-09-17	125.00	--	520	--	--	--	--	--	--
SO JERSEY WS CO 3	80-09-17	35.00	270	268	225	266	234	265	10	250
PITMAN BORO WD P2	80-09-17	130.00	526	515	462	515	475	515	180	220
WASHINGTON TWP MUA 6-64	80-09-17	152.00	--	652	--	--	584	652	10	500
SWEDESBORO BORO WD 3	80-09-10	70.00	--	315	--	--	--	--	--	--
PURELAND WC 2 (3-1973)	80-09-26	29.00	--	208	--	--	--	--	--	--
PURELAND WC LANDTECT 1	80-09-30	20.40	--	284	--	--	--	--	--	--
SEWELL WC 1	80-08-04	80.00	--	377	--	--	--	--	--	--
PURELAND WC TEST WELL3	80-09-26	8.00	--	345	--	--	--	--	--	--
PURELAND WC 1-1973	80-09-26	7.60	--	138	--	--	--	--	--	--
WOODBURY CTY WD-SEWEL 2A	80-08-27	21.00	--	303	--	--	--	--	--	--
SEWELL WC 2	80-08-04	60.00	--	368	--	--	--	--	--	--
MANTUA WC 2	80-08-04	65.00	--	317	--	--	--	--	--	--
MANTUA WC 3	80-08-04	10.00	--	268	--	--	--	--	--	--
MONSANTO CHEM EAST 1	80-09-23	11.00	--	81	--	--	--	--	--	--
WENONAH BORO WD 1	80-08-04	80.00	--	320	--	--	--	--	--	--
PENNS GROVE WC-BRIDGPT 2	80-09-16	20.00	--	88	--	--	--	--	--	--
MONSANTO CHEM 3	80-09-23	10.00	--	94	--	--	--	--	--	--
E GREENWICH TWP WD 3	80-09-05	42.00	--	246	--	--	--	--	--	--
ALLIED ENERGY 1 1977	80-09-15	25.00	--	101	--	--	--	--	--	--
SHELL CHEM CO 3	80-09-24	30.00	--	384	--	--	--	--	--	--
SHELL CHEM CO 4	80-09-24	30.00	--	159	--	--	--	--	--	--
GREENWICH TWP WD 3	80-09-18	10.00	--	168	--	--	--	--	--	--
GREENWICH TWP WD 6	80-09-18	20.00	--	138	--	--	--	--	--	--
PAULSBORO WD 6-73	80-09-11	15.00	--	230	--	--	--	--	--	--
PAULSBORO WD 4-51	80-09-11	15.00	--	226	--	--	--	--	--	--
EI DUPONT REPAUNO 3	80-09-12	10.00	--	101	--	--	--	--	--	--
HERCULES CHEM 4-1970	80-09-15	15.00	--	120	--	--	--	--	--	--
EI DUPONT REPAUNO 6	80-09-12	10.00	--	109	--	--	--	--	--	--
EI DUPONT REPAUNO 5	80-09-12	10.00	--	99	--	--	--	--	--	--
WOODBURY WD RAILROAD 5	80-08-27	35.00	--	457	--	--	--	--	--	--
PAULSBORO WD 5-57	80-09-11	10.00	--	196	--	--	--	--	--	--
MOBIL OIL-GREENWICH 44	80-09-17	20.00	--	139	--	--	--	--	--	--
MOBIL OIL-GREENWICH 45	80-09-17	3.00	--	118	--	--	--	--	--	--
WOODBURY WD-PARK LOT 3	80-08-27	60.00	--	188	--	--	--	--	--	--
MOBIL OIL-GREENWICH 47	80-09-17	20.00	--	245	--	--	--	--	--	--
NATIONAL PARK BORO WD 2	80-09-09	30.00	--	282	--	--	--	--	--	--
TEXACO EAGLE PT 7	80-09-09	10.00	--	306	--	--	--	--	--	--
WESTVILLE BORO WD 5	80-09-02	12.00	--	277	--	--	--	--	--	--
TEXACO EAGLE PT 1	80-09-09	32.00	--	288	--	--	--	--	--	--
WESTVILLE BORO WD 4	80-09-02	16.00	--	319	--	--	--	--	--	--
TEXACO EAGLE PT 5	80-09-09	13.00	--	277	--	--	--	--	--	--
TEXACO EAGLE PT 4A	80-09-09	5.00	--	296	--	--	--	--	--	--

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

SALEM COUNTY

WELL NUMBER	LOCAL IDENT-I-FIER	LAT-I-TUDE	LONG-I-TUDE	SEQ. NO.	GEO-LOGIC UNIT	DATE OF SAMPLE	TEMPER-ATURE, WATER (DEG C)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)
-	PUBLIC SERVICE TEST 1-80	39 27 51	075 32 07	01	211MGRR	80-09-09	22.5	1140	7.8	300
163	RICHMAN ICE CREAM 1	39 39 28	075 21 47	01	211MGRR	80-09-16	16.0	391	8.0	21
122	ATL CITY EL-DEEPWATER 3R	39 40 46	075 30 22	02	211MGRR	80-09-22	14.0	403	6.9	57
127	ATL CITY EL-DEEPWATER 6	39 41 00	075 30 30	01	211MGRR	80-09-22	16.0	696	6.7	140
361	PENNS GROVE WC LAYTN1-79	39 42 04	075 26 59	01	211MGRR	80-09-23	15.0	214	5.9	19
345	PENNS GROVE WC 2B	39 42 47	075 27 14	01	211MGRR	80-09-23	13.0	178	5.1	13
346	PENNS GROVE WC-LAYNE 1	39 42 56	075 27 18	01	211MGRR	80-09-23	14.5	886	7.5	210
103	PENNS GROVE SEW AUTH 1	39 43 46	075 28 28	01	211MGRR	80-09-22	14.5	128	6.6	8.8

LOCAL IDENT-I-FIER	DATE OF SAMPLE	ELEV. OF LAND SURFACE DATUM (FT. NGVD)	DEPTH OF WELL, TOTAL (FEET)
PUBLIC SERVICE TEST 1-80	80-09-09	20.00	1240
RICHMAN ICE CREAM 1	80-09-16	25.00	475
ATL CITY EL-DEEPWATER 3R	80-09-22	10.00	236
ATL CITY EL-DEEPWATER 6	80-09-22	15.00	188
PENNS GROVE WC LAYTN1-79	80-09-23	10.00	68
PENNS GROVE WC 2B	80-09-23	19.00	60
PENNS GROVE WC-LAYNE 1	80-09-23	19.00	357
PENNS GROVE SEW AUTH 1	80-09-22	2.00	60

Geologic unit (aquifer):
211MGRR - Potomac-Raritan-Magothy aquifer system

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FACTORS FOR CONVERTING INCH-POUND UNITS TO INTERNATIONAL SYSTEM UNITS (SI)

The following factors may be used to convert the inch-pound units published herein to the International System of Units (SI). This report contains both the inch-pound and SI unit equivalents in the station manuscript descriptions.

Multiply inch-pound units	By	To obtain SI units
	Length	
inches (in)	2.54×10^{1}	millimeters (mm)
	2.54×10^{-2}	meters (m)
feet (ft)	3.048×10^{-1}	meters (m)
miles (mi)	1.609×10^{0}	kilometers (km)
	Area	
acres	4.047×10^{3}	square meters (m^2)
	4.047×10^{-1}	square hectometers (hm^2)
	4.047×10^{-3}	square kilometers (km^2)
square miles (mi^2)	2.590×10^{0}	square kilometers (km^2)
	Volume	
gallons (gal)	3.785×10^{0}	liters (L)
	3.785×10^{0}	cubic decimeters (dm^3)
	3.785×10^{-3}	cubic meters (m^3)
million gallons	3.785×10^{3}	cubic meters (m^3)
	3.785×10^{-3}	cubic hectometers (hm^3)
cubic feet (ft^3)	2.832×10^{1}	cubic decimeters (dm^3)
	2.832×10^{-2}	cubic meters (m^3)
cfs-days	2.447×10^{3}	cubic meters (m^3)
	2.447×10^{-3}	cubic hectometers (hm^3)
acre-feet (acre-ft)	1.233×10^{3}	cubic meters (m^3)
	1.233×10^{-3}	cubic hectometers (hm^3)
	1.233×10^{-6}	cubic kilometers (km^3)
	Flow	
cubic feet per second (ft^3/s)	2.832×10^{1}	liters per second (L/s)
	2.832×10^{1}	cubic decimeters per second (dm^3/s)
	2.832×10^{-2}	cubic meters per second (m^3/s)
gallons per minute (gal/min)	6.309×10^{-2}	liters per second (L/s)
	6.309×10^{-2}	cubic decimeters per second (dm^3/s)
	6.309×10^{-5}	cubic meters per second (m^3/s)
million gallons per day	4.381×10^{1}	cubic decimeters per second (dm^3/s)
	4.381×10^{-2}	cubic meters per second (m^3/s)
	Mass	
tons (short)	9.072×10^{-1}	megagrams (Mg) or metric tons